ABBREVIATIONS

NOT ALL ABBREVIATIONS MAY BE USED

&	AND	LAV	LAVATORY
@	AT	LB / LBS	POUND (S)
ACT	ACOUSTICAL CEILING TILE	MAT	MATERIAL (S)
ADJ	ADJUSTABLE	MAX	MAXIMUM
AFF	ABOVE FINISH FLOOR	MDF	MEDIUM DENSITY
ALT	ALTERNATE	MECH	MECHANICAL
AL / ALUM	ALUMINUM	MEMB	MEMBRANE
APPROX	APPROXIMATE	MEZZ	MEZZANINE
ARCH	ARCHITECTURAL	MFR	MANUFACTURER
		MGR	MANAGER
BD	BOARD	MIN	MINIMUM
BLDG	BUILDING	MIR	MIRROR
BLK	BLOCK(ING)	MISC	MISCELANEOUS
BO	BOTTOM OF	MO	MASONRY OPENING
BRG	BEARING	MTD	MOUNT (ED)
BSMT	BASEMENT	MTL	METAL
BS	BOTH SIDES	MW	MICROWAVE
BW	BOTH WAYS		
		N	NORTH
CAB	CABINET	NIC	NOT IN CONTRACT
CB	CATCH BASIN	NO.	NUMBER
CCSA	CUSTOM COLOR SELECTED BY ARCHITECT	NOM	NOMINAL
		NRC	NOISE REDUCTION COEFFICIENT
CG	CORNER GUARD	NTS	NOT TO SCALE
CHAM	CHAMFER		
CJ	CONTROL JOINT	OC	ON CENTER
CL	CENTER LINE	OD	OUTSIDE DIAMETER
CLG	CEILING	OFCI	OWNER FURNISHED/ CONTRACTOR INSTALLED
CLR	CLEAR		
CM	CONSTRUCTION MANAGER	OFD	OVERFLOW DRAIN
COL	COLUMN	OH	OVERHEAD
COMP	COMPUTER	OPG	OPENING
CONC	CONCRETE	OPP	OPPOSITE
CONT	CONTINUOUS	OSB	ORIENTED STRAND BOARD
CMU	CONCRETE MASONRY UNIT	OZ	OUNCE
CSBA	COLOR SELECTED BY ARCHITECT		
CT	CERAMIC TILE	PERI	PERIMETER
		PERM	PERMANENT
D	DEPTH	PL	PLATE
DB	DECK BEARING	PLAM	PLASTIC LAMINATE
DBL	DOUBLE	PNL	PANEL
DEPT	DEPARTMENT	PNT	PAINT (ED)
DF	DRINKING FOUNTAIN	P.O.	POINT OF
DIA	DIAMETER	PR	PAIR
DIM	DIMENSION	PT	POST TENSIONED
DN	DOWN	PART	PARTITION
DRN	DRAIN	PLY	PLYWOOD
DTL/DET	DETAIL		
DW	DISHWASHER	QT	QUARRY TILE
DWG	DRAWING		
		R / RAD	RADIUS
E	EAST	RCP	REFLECTED CEILING PLAN
(E)	EXISTING	REC	RECESSED
EA	EACH	REF	REFERENCE
EIFS	EXTERIOR INSULATION SYSTEM	REFG	REFRIGERATOR
EJ	EXPANSION JOINT	REINF	REINFORCE (ED)
ELEC	ELECTRICAL	REM	REMOVE (ED)
ELEV	ELEVATION	REPL	REPLACE
EQ	EQUAL	REQD	REQUIRED
EQUIP	EQUIPMENT	REV	REVISION (S)
EVAP	EVAPORATIVE	RM	ROOM
EXIST	EXISTING	RO	ROUGH OPENING
EXP	EXPANSION		
EXT	EXTERIOR	S	SOUTH
EWC	ELECTRIC WATER COOLER	SALV	SALVAGE (ED)
		SECT	SECTION
FA	FIRE ALARM	SF	SQUARE FOOT
FD	FLOOR DRAIN	SIM	SIMILAR
FDN	FOUNDATION	SLNT	SEALANT
FE	FIRE EXTINGUISHER	SPEC	SPECIFICATION (S)
FEC	FIRE EXTINGUISHER CABINET	SQ	SQUARE
FG	FINISH GRADE	SS	STAINLESS STEEL
FH	FIRE HYDRANT	STC	SOUND TRANSMISSION CLASS
FIN	FINISHED	STD	STANDARD
FLR	FLOOR	STL	STEEL
F.O.	FACE OF	STOR	STORAGE
FT	FOOT, FEET	STRUC	STRUCTURE (AL)
FRP	FIBER REINFORCED PANEL	SUSP	SUSPENDED
FRT	FIRE RETARDANT TREATED WOOD	SYM	SYMMETRY (ICAL)
FTG	FOOTING		
FV	FIELD VERIFY	T	THICKNESS
		T & B	TOP AND BOTTOM
GA	GAUGE	T & G	TONGUE AND GROOVE
GALV	GALVANIZED	TBD	TO BE DETERMINED
GB	GRAB BAR	TEMP	TEMPORARY
GC	GENERAL CONTRACTOR	THRU	THROUGH
GFRC	GLASSFIBER REINFORCED PANEL	T.O.	TOP OF
GYP	GYPSUM	TRANS	TRANSFORMER
GWB	GYPSUM WALLBOARD	TS	TUBE STEEL
		TYP	TYPICAL
HB	HOSE BIB		
HC	HANDICAP ACCESSIBLE	UNF	UNFINISHED
HDW	HARDWARE	UNO	UNLESS OTHERWISE NOTED
HDF	HIGH DENSITY FIBERBOARD		
HM	HOLLOW METAL	VAR	VARIES
H	HEIGHT	VB	VAPOR BARRIER
HOR	HORIZONTAL	VCT	VINYL COMPOSITION TILE
		VERT	VERTICAL
ID	INSIDE DIAMETER	VEST	VESTIBULE
ICF	INSULATED CONCRETE FORM	VWC	VINYL WALL COVERING
IN	INCH		
INCL	INCLUDE	W	WEST
INFO	INFORMATION	W	WIDTH
INT	INTERIOR	W/	WITH
INSUL	INSULATE, (D), (ION)	WC	WATER CLOSET
INV	INVERT	WD	WOOD
		W/O	WITHOUT
JST	JOIST	WSCT	WAINSCOT
JT	JOINT	WWF	WELDED WIRE FABRIC

VICINITY MAP

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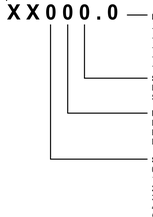
SHEET NUMBERING + NAMING



THIS IS A QUICK REFERENCE GUIDE TO THE SHEET NUMBERING AND NAMING SYSTEM USED IN VCBO CONSTRUCTION DOCUMENTS.

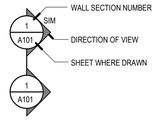
PLAN TYPE
.0 SLAB PLAN
.1 ANNOTATED PLAN
.2 DIMENSION + WALL TYPE PLAN
.3 FINISH PLAN
.4 REFLECTED CEILING PLAN

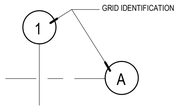
SEQUENCE
DENOTES AREA SEQUENCE IN PLAN, AND NUMERIC SEQUENCE IN NON-PLAN SHEETS

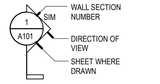
LEVEL
DENOTES LEVEL IN A MULTI-STORY BUILDING. ALSO BECOMES A SEQUENCE NUMBER DENOTING DIVISIONS IN NON-PLAN SHEETS

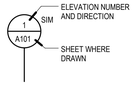
SHEET TYPE SEQUENCE
0 GENERAL NOTES + LEGENDS
1 FLOOR PLANS
2 ELEVATIONS
3 SECTIONS
4 ENLARGED PLANS, ELEVATIONS, SECTIONS
5 DETAILS
6 DOOR, WINDOW, OTHER SCHEDULES
7 SIGNAGE
8 USER DEFINED
9 3D DRAWINGS + PERSPECTIVES

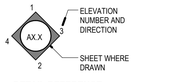
REFERENCE SYMBOL LEGEND

BUILDING SECTION


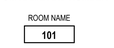
LAYOUT GRID LINES


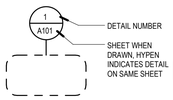
WALL SECTION


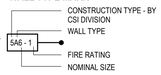
DETAIL SECTION


INTERIOR ELEVATION


LEVEL LINE

ROOM NAME AND NUMBER


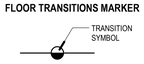
DETAIL REFERENCE


WALL TYPE MARK


SEE WALL TYPE SHEET FOR ADDITIONAL INFORMATION

DRAWING TAGS

REVISIONS TAG

FLOOR TRANSITIONS MARKER


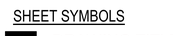
CEILING TAG

ELEVATION MARKER

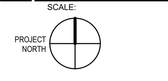
WINDOW TAG

FINISH TAG

SHEET SYMBOLS



BASIC DRAWING TITLE



GENERAL NOTES

1. IT IS THE CONTRACTORS RESPONSIBILITY TO REVIEW AND COORDINATE THE WORK OF ALL SUB-CONTRACTORS, TRADES AND SUPPLIERS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BEFORE COMMENCING CONSTRUCTION, AND TO ASSURE THAT ALL PARTIES ARE AWARE OF ALL REQUIREMENTS, REGARDLESS OF WHERE THE REQUIREMENTS OCCUR IN THE CONTRACT DOCUMENTS, WHICH MIGHT AFFECT THE WORK OF THAT PARTY.

2. AS PART OF THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE WORK OF ALL SUB-CONTRACTORS, TRADES AND SUPPLIERS, THE CONTRACTOR SHALL ENDEAVOR TO IDENTIFY AND NOTIFY THE ARCHITECT OF ANY CONFLICTS BETWEEN THE WORK OF DIFFERENT PARTIES AT THE EARLIEST POSSIBLE DATE SO AS TO ALLOW REASONABLE AND ADEQUATE TIME FOR THE CONFLICT TO BE RESOLVED WITHOUT DELAYING THE WORK. ALL DEVIATIONS FROM THAT WHICH IS REQUIRED BY THE CONTRACT DOCUMENTS MUST BE APPROVED IN ADVANCE BY THE ARCHITECT.

3. THE ARCHITECTURAL DRAWINGS ESTABLISH AND COORDINATE THE FINISHED APPEARANCE AND EXACT LOCATION OF ALL EXPOSED ELEMENTS OF THE WORK OF ALL THE TRADES, INCLUDING THAT WORK WHICH IS ILLUSTRATED PRIMARILY ON DRAWINGS OF OTHER DISCIPLINES. QUANTITIES ARE TO BE PROVIDED AS SHOWN ON DRAWINGS OF OTHER DISCIPLINES BUT LOCATIONS SHOWN ON OTHER DRAWINGS ARE SCHEMATIC, UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS. THE ARCHITECTURAL DRAWINGS TAKE PRECEDENCE FOR THE FINISHED APPEARANCE AND EXACT LOCATION OF ALL PARTS OF THE WORK.

4. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN; DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED.

5. CONTRACTOR TO FOLLOW CURRENT ANSI 117-1 STANDARDS AS REPRESENTED ON SHEET G301, GENERAL ACCESSIBILITY GUIDELINES. NOTIFY ARCHITECT IF THE DESIGN DRAWINGS CONFLICT WITH THIS SHEET.

DESIGN DATA

GOVERNING BUILDING CODES:
IBC 2021, to include Appendix J; ANSI 117.1 2017; IFC 2021w/ UTAH AMENDMENTS;
IMC 2021; IPC 2021; IECC 2021; IFGC 2021; NEC 2020

OCCUPANCY TYPE - CH.3
- **E - EDUCATION** (305)

CONSTRUCTION TYPE - CH.6
- **TYPE II-B** (TABLE 601)

NOTES TO BIDDERS

1. THIS SHEET CONTAINS A LIST OF DRAWINGS WHICH COMPRISE A FULL SET OF DRAWINGS FOR THIS PROJECT. ANY CONTRACTOR, SUBCONTRACTOR, VENDOR OR ANY OTHER PERSON PARTICIPATING IN OR BIDDING ON THIS PROJECT SHALL BE RESPONSIBLE FOR THE INFORMATION CONTAINED IN ANY AND ALL SHEETS OF DRAWINGS AND SPECIFICATIONS. IF ANY PERSON, PARTY OR ENTITY ELECTS TO SUBMIT BIDS FOR ANY PORTION, OR ALL, OF THIS PROJECT, THAT PERSON, PARTY OR ENTITY SHALL BE RESPONSIBLE FOR ANY AND ALL INFORMATION CONTAINED IN THESE DRAWINGS AND SPECIFICATIONS, INCLUDING, BUT NOT LIMITED TO, ANY SUBSEQUENT ADDENDUMS OR CLARIFICATIONS THAT MAY BE ISSUED.

2. THESE DOCUMENTS SHOW THE DESIGN INTENT. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE EVERYTHING SHOWN ON THE DRAWINGS OR SPECIFIED REGARDLESS OF WHERE IT IS SHOWN ON THE DRAWINGS OR IN THE SPECIFICATIONS. FOR EXAMPLE; SOME MILLWORK DETAILS HAVE STEEL FRAMES WHICH MAY BE PROVIDED BY DIVISION 05 OR WITH THE MILLWORK AT THE CONTRACTOR'S DISCRETION, BUT IT SHALL BE PROVIDED AS PART OF THE CONTRACT.

3. EVERYTHING CALLED FOR IN THESE DOCUMENTS SHALL BE "NEW" AND PROVIDED BY THE CONTRACTOR, SUBCONTRACTOR, VENDOR OR ANY OTHER PERSON PARTICIPATING IN OR BIDDING ON THIS PROJECT UNLESS NOTED OTHERWISE AS EXISTING (EXIST), NOT IN CONTRACT (NIC) OR FOR REFERENCE ONLY. FURNISHINGS SHOWN DASHED SHALL BE FOR REFERENCE ONLY.

SHEET INDEX

NOTE: SHEET INDEX REFLECTS ALL SHEETS ISSUED IN THIS AND PREVIOUS BID PACKAGES, FOR REFERENCE

Sheet Number	Sheet Name	Bid Package #1	Bid Package #2	Bid Package #3	Bid Package #4	Bid Package #5
GENERAL						
CV	COVER	●	●	●		●
G001	GENERAL INFORMATION + INDEX	●	●	●		●
G101	CODE + LIFE SAFETY					●
G102	CODE + LIFE SAFETY					●
G201	UL RATED METAL STUD WALL ASSEMBLIES					●
G202	UL RATED COMMON THROUGH-PENETRATION FIRESTOP SYSTEMS					●
G209	GYPSUM ASSOCIATION RATED ASSEMBLIES					●
G301	TYPICAL ACCESSIBILITY STANDARDS					●
G302	TYPICAL ACCESSIBILITY STANDARDS					●
G303	TYP. ADDITIONAL ACCESSIBILITY STANDARDS FOR BLDGS UTILIZED & OCCUPIED BY CHILDREN					●
G401	FOR REFERENCE ONLY - RENDERS					●
G402	FOR REFERENCE ONLY - RENDERS					●
CIVIL						
C100	GENERAL NOTES AND DETAILS					●
C101	UTILITY DETAILS					●
C102	CITY DETAILS					●
C103	CITY DETAILS					●
C104	CITY DETAILS					●
C105	STORMTECH DETAILS					●
C200	EXISTING SURVEY & TOPOGRAPHY	●				●
CS210	OVERALL SITE AND UTILITY DEMOLITION PLAN					●
CS230	OVERALL SITE LAYOUT					●
CS231	ENLARGED SITE LAYOUT					●
CS232	ENLARGED SITE LAYOUT					●
CU300	OVERALL UTILITY PLAN					●
CU301	ENLARGED UTILITY PLAN					●
CU302	ENLARGED UTILITY PLAN					●
CU310	ON SITE SEWER PLAN AND PROFILE					●
CU311	ON SITE SEWER PLAN AND PROFILE					●
CU312	ON SITE SEWER PLAN AND PROFILE					●
CG400	OVERALL GRADING PLAN					●
CG401	ENLARGED GRADING PLAN					●
CG402	ENLARGED GRADING PLAN					●
CG450	HYDROLOGY PLAN					●
CG460	CUT FILL PLAN					●
CS00	EROSION CONTROL PLAN	●				
CS10	EROSION CONTROL DETAILS	●				
CG400*	ROUGH GRADING PLAN	●				
CS210*	UTILITY DEMOLITION PLAN	●				
CS220*	SITE DEMOLITION PLAN	●				
LANDSCAPE						
L101	PLANTING PLAN					●
L102	PLANTING PLAN					●
L103	PLANTING PLAN					●
L201	IRRIGATION PLAN					●
L202	IRRIGATION PLAN					●
L203	IRRIGATION PLAN					●
L501	IRRIGATION DETAILS					●
L502	IRRIGATION DETAILS					●
L503	LANDSCAPE DETAILS					●
DEMOLITION						
ADS101	DEMOLITION PLAN - SITE	●				
ADS500	SITE DEMO DETAILS	●				
ARCHITECTURAL SITE						
AS101	OVERALL SITE PLAN		●	●		●
AS102	ENLARGED SITE PLANS					●
AS103	ENLARGED SITE PLANS					●
AS401	SITE VERTICAL CIRCULATION					●
AS501	SITE DETAILS					●
AS810	SITE DETAILS					●
ARCHITECTURAL						
A010	OVERALL MAIN LEVEL FLOOR PLAN	●				●
A011	OVERALL MAIN LEVEL REFLECTED CEILING PLAN					●
A020	OVERALL UPPER LEVEL FLOOR PLAN	●				●
A021	OVERALL UPPER LEVEL REFLECTED CEILING PLAN					●
A030	OVERALL ROOF PLAN			●		●
A101.1	SLAB EDGE PLAN - LEVEL 01 - AREA'S 11 & 12	●	●			●
A101.2	SLAB EDGE PLAN - LEVEL 01 - AREA'S 13 & 14	●	●			●
A101.3	SLAB EDGE PLAN - LEVEL 02 - AREA 21 & 22		●			●
A101.4	SLAB EDGE PLAN - LEVEL 02 - AREA 23 & 24		●			●
A111.1	AREA 11 ENLARGED ANNOTATED PLAN - LEVEL 01					●
A111.2	AREA 11 ENLARGED DIMENSION + WALL TYPE PLAN - LEVEL 01					●
A111.3	AREA 11 ENLARGED FINISH PLAN - LEVEL 01					●
A111.4	AREA 11 ENLARGED REFLECTED CEILING PLAN - LEVEL 01					●
A112.1	AREA 12 ENLARGED ANNOTATED PLAN - LEVEL 01					●
A112.2	AREA 12 ENLARGED DIMENSION + WALL TYPE PLAN - LEVEL 01					●
A112.3	AREA 12 ENLARGED FINISH PLAN - LEVEL 01					●
A112.4	AREA 12 ENLARGED REFLECTED CEILING PLAN - LEVEL 01					●
A113.1	AREA 13 ENLARGED ANNOTATED PLAN - LEVEL 01					●
A113.2	AREA 13 ENLARGED DIMENSION + WALL TYPE PLAN - LEVEL 01					●
A113.3	AREA 13 ENLARGED FINISH PLAN - LEVEL 01					●
A113.4	AREA 13 ENLARGED REFLECTED CEILING PLAN - LEVEL 01					●
A114.1	AREA 14 ENLARGED ANNOTATED PLAN - LEVEL 01					●
A114.2	AREA 14 ENLARGED DIMENSION + WALL TYPE PLAN - LEVEL 01					●
A114.3	AREA 14 ENLARGED FINISH PLAN - LEVEL 01					●
A114.4	AREA 14 ENLARGED REFLECTED CEILING PLAN - LEVEL 01					●
A121.1	AREA 21 ENLARGED ANNOTATED PLAN - LEVEL 02					●
A121.2	AREA 21 ENLARGED DIMENSION + WALL TYPE PLAN - LEVEL 02					●
A121.3	AREA 21 ENLARGED FINISH PLAN - LEVEL 02					●
A121.4	AREA 21 ENLARGED REFLECTED CEILING PLAN - LEVEL 02					●
A122.1	AREA 22 ENLARGED ANNOTATED PLAN - LEVEL 02					●
A122.2	AREA 22 ENLARGED DIMENSION + WALL TYPE PLAN - LEVEL 02					●
A122.3	AREA 22 ENLARGED FINISH PLAN - LEVEL 02					●
A122.4	AREA 22 ENLARGED REFLECTED CEILING PLAN - LEVEL 02					●
A123.1	AREA 23 ENLARGED ANNOTATED PLAN - LEVEL 02					●
A123.2	AREA 23 ENLARGED DIMENSION + WALL TYPE PLAN - LEVEL 02					●
A123.3	AREA 23 ENLARGED FINISH PLAN - LEVEL 02					●
A123.4	AREA 23 ENLARGED REFLECTED CEILING PLAN - LEVEL 02					●
A124.1	AREA 24 ENLARGED ANNOTATED PLAN - LEVEL 02					●
A124.2	AREA 24 ENLARGED DIMENSION + WALL TYPE PLAN - LEVEL 02					●
A124.3	AREA 24 ENLARGED FINISH PLAN - LEVEL 02					●
A124.4	AREA 24 ENLARGED REFLECTED CEILING PLAN - LEVEL 02					●
A131.1	AREA 31 ROOF PLAN			●		●
A132.1	AREA 32 ROOF PLAN			●		●
A133.1	AREA 33 ROOF PLAN			●		●
A134.1	AREA 34 ROOF PLAN			●		●
A201	EXTERIOR ELEVATIONS					●
A202	EXTERIOR ELEVATIONS					●
A203	EXTERIOR ELEVATIONS					●
A204	EXTERIOR ELEVATIONS					●
A205	EXTERIOR ELEVATIONS					●
A206	ENLARGED EXTERIOR ELEVATION					●
A207	ENLARGED EXTERIOR ELEVATION					●
A208	ENLARGED EXTERIOR ELEVATION					●
A301	BUILDING SECTIONS					●
A302	BUILDING SECTIONS					●
A303	BUILDING SECTIONS					●
A310	WALL SECTIONS					●
A311	WALL SECTIONS					●
A312	WALL SECTIONS					●
A313	WALL SECTIONS					●
A314	WALL SECTIONS					●
A400	FINISH LEGEND + SCHEDULE					●
A401	ENLARGED PLANS & INTERIOR ELEVATIONS					●
A402	ENLARGED PLANS & INTERIOR ELEVATIONS					●
A403	ENLARGED PLANS & INTERIOR ELEVATIONS					●
A404	ENLARGED PLANS & INTERIOR ELEVATIONS					●
A405	ENLARGED PLANS & INTERIOR ELEVATIONS					●
A406	ENLARGED PLANS & INTERIOR ELEVATIONS					●
A407	ENLARGED PLANS & INTERIOR ELEVATIONS					●
A408	ENLARGED PLANS & INTERIOR ELEVATIONS					●
A409	ENLARGED PLANS & INTERIOR ELEVATIONS					●
A410	INTERIOR ELEVATIONS					●
A411	TYPICAL PORTAL ENTRY PLANS, ELEVATIONS, & DETAILS					●
A451	ENLARGED VERTICAL CIRCULATION					●
A452	ENLARGED VERTICAL CIRCULATION					●
A453	ENLARGED VERTICAL CIRCULATION					●
A500	WALL TYPES + GENERAL NOTES					●
A510	EXTERIOR DETAILS					●
A511	EXTERIOR DETAILS					●
A512	EXTERIOR DETAILS					●
A520	INTERIOR FRAMING DETAILS					●
A530	CEILING DETAILS					●
A531	CEILING DETAILS					●
A540	ROOF DETAILS					●
A541	ROOF DETAILS					●
A550	VERTICAL CIRCULATION DETAILS					●
A551	STANDARD VERTICAL CIRCULATION DETAILS					●
A560	DOOR + WINDOW DETAILS					●
A561	DOOR + WINDOW DETAILS					●
A562	EXTERIOR CURTAINWALL & STOREFRONT DETAILS					●
A563	INTERIOR STOREFRONT AND BUTT GLAZING DETAILS					●
A564	BUTT GLAZING DETAILS					●
A570	CASEWORK DETAILS					●
A571	CASEWORK DETAILS					●
A572	CASEWORK DETAILS - CUSTOM					●
A573	FLOOR + BASE DETAILS					●
A574	FLOOR + BASE DETAILS					●
A600	DOOR SCHEDULE + ELEVATIONS					●
A610	CURTAINWALL + STOREFRONT ELEVATIONS					●
A611	CURTAINWALL + STOREFRONT + WINDOW ELEVATIONS					●
A612	BUTT GLAZING ELEVATIONS					●
A700	SIGNAGE TYPES + DETAILS					●
A711	SIGNAGE SCHEDULE + PLANS - LEVEL 1 - AREA 11					●
A712	SIGNAGE SCHEDULE + PLANS - LEVEL 1 - AREA 12					●
A713	SIGNAGE SCHEDULE + PLANS - LEVEL 1 - AREA 13					●
A714	SIGNAGE SCHEDULE + PLANS - LEVEL 1 - AREA 14					●
A721	SIGNAGE SCHEDULE + PLANS - LEVEL 2 - AREA 21					●
A722	SIGNAGE SCHEDULE + PLANS - LEVEL 2 - AREA 22					●
A723	SIGNAGE SCHEDULE + PLANS - LEVEL 2 - AREA 23					●
A724	SIGNAGE SCHEDULE + PLANS - LEVEL 2 - AREA 24					●
FOOD SERVICE						
FS101	AREA 12 FOOD SERVICE EQUIPMENT PLAN					●
FS102	AREA 12 FOOD SERVICE EQUIPMENT CUSTOM EQUIPMENT DETAILS					●
FS201	AREA 12 FOOD SERVICE EQUIPMENT BUILDING REQUIREMENT PLAN					●
FS301	AREA 12 FOOD SERVICE EQUIPMENT PLUMBING REQUIREMENT PLAN					●
FS401	AREA 12 FOOD SERVICE EQUIPMENT ELECTRICAL REQUIREMENT PLAN					●
STRUCTURAL						
S001	GENERAL STRUCTURAL NOTES	●	●			●
S002	GENERAL STRUCTURAL NOTES	●	●			●
S003	SPECIAL INSPECTIONS			●		●
S004	SPECIAL INSPECTIONS	●	●			●
S005	SPECIAL INSPECTIONS			●		●
S010	LEGENDS AND ABBREVIATIONS	●	●			●
S101	FOOTING AND FOUNDATION PLAN - OVERALL	●	●			●
S101.1	FOOTING AND FOUNDATION PLAN - AREA 11	●	●			●
S101.2	FOOTING AND FOUNDATION PLAN - AREA 12	●	●			●
S101.3	FOOTING AND FOUNDATION PLAN - AREA 13	●	●			●
S101.4	FOOTING AND FOUNDATION PLAN - AREA 14	●	●			●
S111	LEVEL 2 FRAMING PLAN - OVERALL	●	●			●
S111.1	LEVEL 2 FRAMING PLAN - AREA 21	●	●			●
S111.2	LEVEL 2 FRAMING PLAN - AREA 22	●	●			●
S111.3	LEVEL 2 FRAMING PLAN - AREA 23	●	●			●
S111.4	LEVEL 2 FRAMING PLAN - AREA 24	●	●			●
S121	ROOF FRAMING PLAN - OVERALL	●	●

ABBREVIATIONS

NOT ALL ABBREVIATIONS MAY BE USED

&	AND
@	AT
ACT	ACOUSTICAL CEILING TILE
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
AL / ALUM	ALUMINUM
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BD	BOARD
BLDG	BUILDING
BLK	BLOCK(ING)
BO	BOTTOM OF
BRG	BEARING
BSMT	BASEMENT
BS	BOTH SIDES
BW	BOTH WAYS
CAB	CABINET
CB	CATCH BASIN
CCSA	CUSTOM COLOR SELECTED BY ARCHITECT
CG	CORNER GUARD
CHAM	CHAMFER
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CM	CONSTRUCTION MANAGER
COL	COLUMN
COMP	COMPUTER
CONC	CONCRETE
CONT	CONTINUOUS
CMU	CONCRETE MASONRY UNIT
CSBA	COLOR SELECTED BY ARCHITECT
CT	CERAMIC TILE
D	DEPTH
DB	DECK BEARING
DBL	DOUBLE
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DRN	DRAIN
DTL/DET	DETAIL
DW	DISHWASHER
DWG	DRAWING
E	EAST
(E)	EXISTING
EA	EACH
EIFS	EXTERIOR INSULATION SYSTEM
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EVAP	EVAPORATIVE
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
EWC	ELECTRIC WATER COOLER
FA	FIRE ALARM
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FG	FINISH GRADE
FH	FIRE HYDRANT
FIN	FINISHED
FLR	FLOOR
F.O.	FACE OF
FT	FOOT, FEET
FRP	FIBER REINFORCED PANEL
FRT	FIRE RETARDANT TREATED WOOD
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GFRC	GLASSFIBER REINFORCED PANEL
GYP	GYPSUM
GWB	GYPSUM WALLBOARD
HB	HOSE BIB
HC	HANDICAP ACCESSIBLE
HDW	HARDWARE
HDF	HIGH DENSITY FIBERBOARD
HM	HOLLOW METAL
H	HEIGHT
HOR	HORIZONTAL
ID	INSIDE DIAMETER
ICF	INSULATED CONCRETE FORM
IN	INCH
INCL	INCLUDE
INFO	INFORMATION
INT	INTERIOR
INSUL	INSULATE, (D), (ION)
INV	INVERT
JST	JOIST
JT	JOINT
LAV	LAVATORY
LB / LBS	POUND (S)
MAT	MATERIAL (S)
MAX	MAXIMUM
MDF	MEDIUM DENSITY
MECH	MECHANICAL
MEMB	MEMBRANE
MEZZ	MEZZANINE
MFR	MANUFACTURER
MGR	MANAGER
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELANEOUS
MO	MASONRY OPENING
MTD	MOUNT (ED)
MTL	METAL
MW	MICROWAVE
N	NORTH
NIC	NOT IN CONTRACT
NO.	NUMBER
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED/ CONTRACTOR INSTALLED
OFD	OVERFLOW DRAIN
OH	OVERHEAD
OPG	OPENING
OPP	OPPOSITE
OSB	ORIENTED STRAND BOARD
OZ	OUNCE
PERI	PERIMETER
PERM	PERMANENT
PL	PLATE
PLAM	PLASTIC LAMINATE
PNL	PANEL
PNT	PAINT (ED)
P.O.	POINT OF
PR	PAIR
PT	POST TENSIONED
PART	PARTITION
PLY	PLYWOOD
QT	QUARRY TILE
R / RAD	RADIUS
RCP	REFLECTED CEILING PLAN
REC	RECESSED
REF	REFERENCE
REFG	REFRIGERATOR
REINF	REINFORCE (ED)
REM	REMOVE (ED)
REPL	REPLACE
REQD	REQUIRED
REV	REVISION (S)
RM	ROOM
RO	ROUGH OPENING
S	SOUTH
SALV	SALVAGE (ED)
SECT	SECTION
SF	SQUARE FOOT
SIM	SIMILAR
SLNT	SEALANT
SPEC	SPECIFICATION (S)
SQ	SQUARE
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUC	STRUCTURE (AL)
SUSP	SUSPENDED
SYM	SYMMETRY (ICAL)
T	THICKNESS
T & B	TOP AND BOTTOM
T & G	TONGUE AND GROOVE
TBD	TO BE DETERMINED
TEMP	TEMPORARY
THRU	THROUGH
T.O.	TOP OF
TRANS	TRANSFORMER
TS	TUBE STEEL
TYP	TYPICAL
UNF	UNFINISHED
UNO	UNLESS OTHERWISE NOTED
VAR	VARIES
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VWC	VINYL WALL COVERING
W	WEST
W	WIDTH
W/	WITH
WC	WATER CLOSET
WD	WOOD
W/O	WITHOUT
WSCT	WAINSCOT
WWF	WELDED WIRE FABRIC

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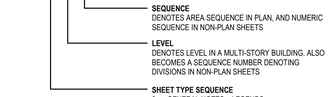
SHEET NUMBERING + NAMING



THIS IS A QUICK REFERENCE GUIDE TO THE SHEET NUMBERING AND NAMING SYSTEM USED IN VCBO CONSTRUCTION DOCUMENTS.

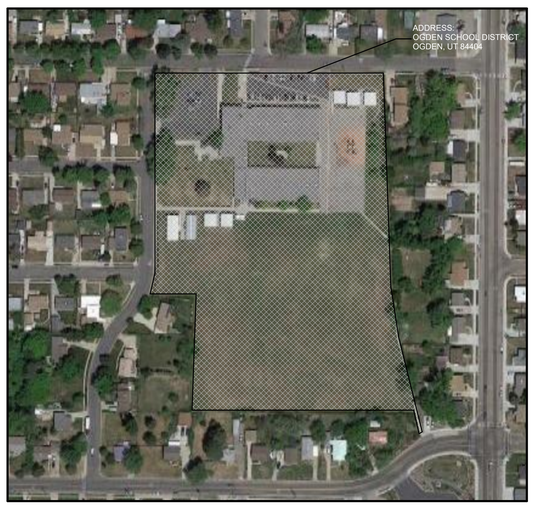
PLAN TYPE
.0 SLAB PLAN
.1 ANNOTATED PLAN
.2 DIMENSION + WALL TYPE PLAN
.3 FINISH PLAN
.4 REFLECTED CEILING PLAN

SEQUENCE
DENOTES AREA SEQUENCE IN PLAN, AND NUMERIC SEQUENCE IN NON-PLAN SHEETS

LEVEL
DENOTES LEVEL IN A MULTI-STORY BUILDING. ALSO BECOMES A SEQUENCE NUMBER DENOTING DIVISIONS IN NON-PLAN SHEETS

SHEET TYPE SEQUENCE
0 GENERAL NOTES + LEGENDS
1 FLOOR PLANS
2 ELEVATIONS
3 SECTIONS
4 ENLARGED PLANS, ELEVATIONS, SECTIONS
5 DETAILS
6 DOOR, WINDOW, OTHER SCHEDULES
7 SIGNAGE
8 USER DEFINED
9 3D DRAWINGS + PERSPECTIVES

VICINITY MAP



REFERENCE SYMBOL LEGEND

BUILDING SECTION
WALL SECTION NUMBER
DIRECTION OF VIEW
SHEET WHERE DRAWN

LAYOUT GRID LINES
GRID IDENTIFICATION

WALL SECTION
WALL SECTION NUMBER
DIRECTION OF VIEW
SHEET WHERE DRAWN

DETAIL SECTION
ELEVATION NUMBER AND DIRECTION
SHEET WHERE DRAWN

INTERIOR ELEVATION
ELEVATION NUMBER AND DIRECTION
SHEET WHERE DRAWN

LEVEL LINE
SECOND LEVEL
116' - 0"

ROOM NAME AND NUMBER
ROOM NAME
101

DETAIL REFERENCE
DETAIL NUMBER
SHEET WHEN DRAWN, HYPEN INDICATES DETAIL ON SAME SHEET

WALL TYPE MARK
CONSTRUCTION TYPE - BY CSI DIVISION
WALL TYPE
FIRE RATING
NOMINAL SIZE
SEE WALL TYPE SHEET FOR ADDITIONAL INFORMATION

DRAWING TAGS

REVISIONS TAG
REVISION NUMBER

FLOOR TRANSITIONS MARKER
TRANSITION SYMBOL

CEILING TAG
CEILING TYPE
CEILING HEIGHT

ELEVATION MARKER

WINDOW TAG
WINDOW MARKER

FINISH TAG
NAME T: W?
R: W?
B? SB: W?
F? PL: W?

SHEET SYMBOLS

 # DRAWING TITLE
SCALE:
BASIC DRAWING TITLE

PROJECT NORTH

MATCH LINE

GENERAL NOTES

1. IT IS THE CONTRACTORS RESPONSIBILITY TO REVIEW AND COORDINATE THE WORK OF ALL SUB-CONTRACTORS, TRADES AND SUPPLIERS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BEFORE COMMENCING CONSTRUCTION, AND TO ASSURE THAT ALL PARTIES ARE AWARE OF ALL REQUIREMENTS, REGARDLESS OF WHERE THE REQUIREMENTS OCCUR IN THE CONTRACT DOCUMENTS, WHICH MIGHT AFFECT THE WORK OF THAT PARTY.

2. AS PART OF THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE WORK OF ALL SUB-CONTRACTORS, TRADES AND SUPPLIERS, THE CONTRACTOR SHALL ENDEAVOR TO IDENTIFY AND NOTIFY THE ARCHITECT OF ANY CONFLICTS BETWEEN THE WORK OF DIFFERENT PARTIES AT THE EARLIEST POSSIBLE DATE SO AS TO ALLOW REASONABLE AND ADEQUATE TIME FOR THE CONFLICT TO BE RESOLVED WITHOUT DELAYING THE WORK. ALL DEVIATIONS FROM THAT WHICH IS REQUIRED BY THE CONTRACT DOCUMENTS MUST BE APPROVED IN ADVANCE BY THE ARCHITECT.

3. THE ARCHITECTURAL DRAWINGS ESTABLISH AND COORDINATE THE FINISHED APPEARANCE AND EXACT LOCATION OF ALL EXPOSED ELEMENTS OF THE WORK OF ALL THE TRADES, INCLUDING THAT WORK WHICH IS ILLUSTRATED PRIMARILY ON DRAWINGS OF OTHER DISCIPLINES. QUANTITIES ARE TO BE PROVIDED AS SHOWN ON DRAWINGS OF OTHER DISCIPLINES BUT LOCATIONS SHOWN ON OTHER DRAWINGS ARE SCHEMATIC, UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS. THE ARCHITECTURAL DRAWINGS TAKE PRECEDENCE FOR THE FINISHED APPEARANCE AND EXACT LOCATION OF ALL PARTS OF THE WORK.

4. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN; DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED.

5. CONTRACTOR TO FOLLOW CURRENT ANSI 117-1 STANDARDS AS REPRESENTED ON SHEET G301, GENERAL ACCESSIBILITY GUIDELINES. NOTIFY ARCHITECT IF THE DESIGN DRAWINGS CONFLICT WITH THIS SHEET.

DESIGN DATA

GOVERNING BUILDING CODES:
IBC 2021, to include Appendix J; ANSI 117.1 2017; IFC 2021w/ UTAH AMENDMENTS;
IMC 2021; IPC 2021; IECC 2021; IFGC 2021; NEC 2020

OCCUPANCY TYPE - CH.3
- **E - EDUCATION** (305)

CONSTRUCTION TYPE - CH.6
- **TYPE II-B** (TABLE 601)

SHEET INDEX

NOTE: SHEET INDEX REFLECTS ALL SHEETS ISSUED IN THIS AND PREVIOUS BID PACKAGES, FOR REFERENCE

Sheet Number	Sheet Name	VCBO Sheet Sorting (i.e. 1 - SITE)	VCBO Discipline Title (i.e. ARCHITECTURAL)	VCBO Discipline Sorting (i.e. 5 - Architectural)	RVT Link: Name	Bid Package #1	Bid Package #2	Bid Package #3	Bid Package #4	Bid Package #1	Bid Package #2	Bid Package #3	Bid Package #4
GENERAL													
CV	COVER	1 - GENERAL	GENERAL	1.0 GENERAL		Yes	Yes	No	No	•	•		
G001a	GENERAL INFORMATION + INDEX	1 - GENERAL	GENERAL	1.0 GENERAL		Yes	Yes	No	No	•	•		
CIVIL													
C200	EXISTING SURVEY & TOPOGRAPHY	1 - CIVIL	CIVIL	2.0 - CIVIL		Yes	No	No	No	•			
C500	EROSION CONTROL PLAN	1 - CIVIL	CIVIL	2.0 - CIVIL		Yes	No	No	No	•			
C510	EROSION CONTROL DETAILS	1 - CIVIL	CIVIL	2.0 - CIVIL		Yes	No	No	No	•			
CG400	ROUGH GRADING PLAN	1 - CIVIL	CIVIL	2.0 - CIVIL		Yes	No	No	No	•			
CS210	UTILITY DEMOLITION PLAN	1 - CIVIL	CIVIL	2.0 - CIVIL		Yes	No	No	No	•			
CS220	SITE DEMOLITION PLAN	1 - CIVIL	CIVIL	2.0 - CIVIL		Yes	No	No	No	•			
DEMOLITION													
ADS101	DEMOLITION PLAN - SITE	1 - DEMOLITION	DEMOLITION	4.0 DEMOLITION		Yes	No	No	No	•			
ADS500	SITE DEMO DETAILS	1 - DEMOLITION	DEMOLITION	4.0 DEMOLITION		Yes	No	No	No	•			
ARCHITECTURAL SITE													
AS101	OVERALL SITE PLAN	1 - ARCHITECTURAL SITE	ARCHITECTURAL SITE	4.9 ARCHITECTURAL SITE		No	Yes	No	No		•		
ARCHITECTURAL													
A010	OVERALL MAIN LEVEL FLOOR PLAN	A000 OVERALL PLANS	ARCHITECTURAL	5.0 ARCHITECTURAL		No	Yes	No	No		•		
A020	OVERALL UPPER LEVEL FLOOR PLAN	A000 OVERALL PLANS	ARCHITECTURAL	5.0 ARCHITECTURAL		No	Yes	No	No		•		
A101.1	SLAB EDGE PLAN - LEVEL 01 - AREA'S 11 & 12	A100 PLANS	ARCHITECTURAL	5.0 ARCHITECTURAL		No	Yes	No	No		•		
A101.2	SLAB EDGE PLAN - LEVEL 01 - AREA'S 13 & 14	A100 PLANS	ARCHITECTURAL	5.0 ARCHITECTURAL		No	Yes	No	No		•		
STRUCTURAL													
S001	GENERAL STRUCTURAL NOTES	1 - STRUCTURAL GENERAL	STRUCTURAL	10 - STRUCTURAL									
S002	GENERAL STRUCTURAL NOTES	1 - STRUCTURAL GENERAL	STRUCTURAL	10 - STRUCTURAL									
S004	SPECIAL INSPECTIONS	1 - STRUCTURAL GENERAL	STRUCTURAL	10 - STRUCTURAL									
S010	LEGENDS AND ABBREVIATIONS	1 - STRUCTURAL GENERAL	STRUCTURAL	10 - STRUCTURAL									
S101	STRUCTURAL FOOTING AND FOUNDATION PLAN - OVERALL	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S101.1	STRUCTURAL FOOTING AND FOUNDATION PLAN - AREA 11	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S101.2	STRUCTURAL FOOTING AND FOUNDATION PLAN - AREA 12	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S101.3	STRUCTURAL FOOTING AND FOUNDATION PLAN - AREA 13	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S101.4	STRUCTURAL FOOTING AND FOUNDATION PLAN - AREA 14	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S111	LEVEL 2 FRAMING PLAN - OVERALL	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S111.1	LEVEL 2 FRAMING PLAN - AREA 21	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S111.2	LEVEL 2 FRAMING PLAN - AREA 22	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S111.3	LEVEL 2 FRAMING PLAN - AREA 23	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S111.4	LEVEL 2 FRAMING PLAN - AREA 24	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S121	ROOF FRAMING PLAN - OVERALL	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S121.1	ROOF FRAMING PLAN - AREA 31	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S121.2	ROOF FRAMING PLAN - AREA 32	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S121.3	ROOF FRAMING PLAN - AREA 33	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S121.4	ROOF FRAMING PLAN - AREA 34	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S201	BRACE FRAME DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S202	BRACE FRAME ELEVATIONS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S203	BRACE FRAME ELEVATIONS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S401	STAIR DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S402	STAIR ENLARGED PLANS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S501	DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S502	DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S503	DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S504	DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S511	DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S512	DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S513	DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S521	DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S522	DETAILS	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S601	SCHEDULES	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S602	SCHEDULES	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
S603	SCHEDULES	3 - STRUCTURAL	STRUCTURAL	10 - STRUCTURAL									
Grand total: 43													

NOTES TO BIDDERS

1. THIS SHEET CONTAINS A LIST OF DRAWINGS WHICH COMPRISE A FULL SET OF DRAWINGS FOR THIS PROJECT. ANY CONTRACTOR, SUBCONTRACTOR, VENDOR OR ANY OTHER PERSON PARTICIPATING IN OR BIDDING ON THIS PROJECT SHALL BE RESPONSIBLE FOR THE INFORMATION CONTAINED IN ANY AND ALL SHEETS OF DRAWINGS AND SPECIFICATIONS. IF ANY PERSON, PARTY OR ENTITY ELECTS TO SUBMIT BIDS FOR ANY PORTION, OR ALL, OF THIS PROJECT, THAT PERSON, PARTY OR ENTITY SHALL BE RESPONSIBLE FOR ANY AND ALL INFORMATION CONTAINED IN THESE DRAWINGS AND SPECIFICATIONS, INCLUDING, BUT NOT LIMITED TO, ANY SUBSEQUENT ADDENDUMS OR CLARIFICATIONS THAT MAY BE ISSUED.

2. THESE DOCUMENTS SHOW THE DESIGN INTENT. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE EVERYTHING SHOWN ON THE DRAWINGS OR SPECIFIED REGARDLESS OF WHERE IT IS SHOWN ON THE DRAWINGS OR IN THE SPECIFICATIONS. FOR EXAMPLE: SOME MILLWORK DETAILS HAVE STEEL FRAMES WHICH MAY BE PROVIDED BY DIVISION 05 OR WITH THE MILLWORK AT THE CONTRACTOR'S DISCRETION, BUT IT SHALL BE PROVIDED AS PART OF THE CONTRACT.

3. EVERYTHING CALLED FOR IN THESE DOCUMENTS SHALL BE "NEW" AND PROVIDED BY THE CONTRACTOR, SUBCONTRACTOR, VENDOR OR ANY OTHER PERSON PARTICIPATING IN OR BIDDING ON THIS PROJECT UNLESS NOTED OTHERWISE AS EXISTING (EXIST), NOT IN CONTRACT (NIC) OR FOR REFERENCE ONLY. FURNISHINGS SHOWN DASHED SHALL BE FOR REFERENCE ONLY.

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 10, 2023

STATE OF UTAH
DAVID S. COX
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

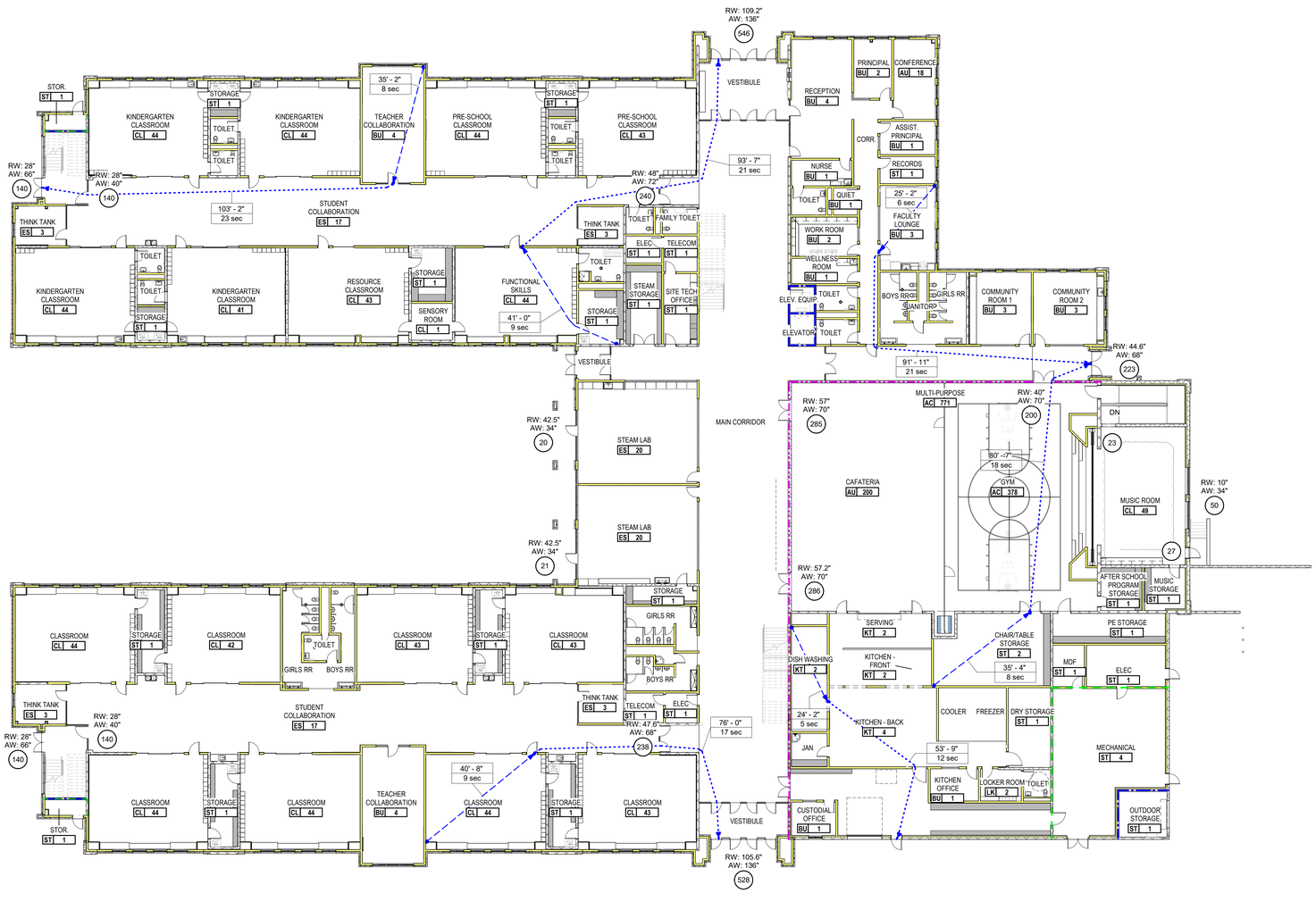
130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 2 - FTG & FDN PACKAGE

GENERAL INFORMATION + INDEX

G001a

8/11/2023 10:37:17 PM



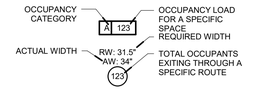
A1 LEVEL 01 - CODE & LIFE SAFETY PLAN

SCALE: 1/16" = 1'-0"

PLUMBING FIXTURE ANALYSIS

IBC 2021 2902.1		
OCCUPANCY TYPE	**E**	
TOTAL APPLICABLE S.F. OCCUPANT LOAD FACTOR TOTAL # OF OCCUPANTS OCCUPANTS CALCULATED FROM SF DIVIDE BY 2	**108,830** **XX** **2,539** **1,659** **830**	 REFER TO TABLE BELOW EA. MALE & FEMALE
WATER CLOSETS		
FEMALE (1:50) MALE (1:50) URINALS (67% of WC in A and E, 50% all other occupancies)	**17** **29** **17** **16** **13**	REQUIRED PROVIDED REQUIRED WC PROVIDED URINAL PROVIDED
LAVATORIES		
FEMALE (1:50) MALE (1:50)	**17** **26** **17** **26**	REQUIRED PROVIDED REQUIRED PROVIDED
DRINKING FOUNTAINS (HIGH/LOW PER IPC 2021 410.3)		
1:**50** (50% may be water coolers or bottled water per IPC 2021 410.3.2 Substitution)	**17** **19**	REQUIRED PROVIDED
SERVICE SINK		
	1 **3**	REQUIRED PROVIDED

OCCUPANCY/EGRESS SYMBOLS



OCCUPANCY/EGRESS NOTES

1. TOTAL EXITING WIDTH REQUIRED = 528.6"
(TOTAL OCCUPANTS X .2 TYP, 0.3 @ STAIRS, PER IBC 1005)
2. TOTAL EXITING WIDTH PROVIDED = 618"
3. ANY AREAS WITH 49 OR MORE OCCUPANTS MUST HAVE (2) EXITS (TABLE 1015.1)
4. ANY AREAS WITH BETWEEN 501 AND 1000 OCCUPANTS SHALL HAVE (3) EXITS (1015.1)
5. IN AREAS THAT REQUIRE (2) EXITS, THOSE EXITS SHALL BE SEPARATED BY NOT LESS THAN ONE-THIRD THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED (1015.2.1 EXCEPTION 2)
6. IN AREAS THAT REQUIRE (3) EXITS AT LEAST (2) OF THE EXITS SHALL BE SEPARATED BY NOT LESS THAN ONE-THIRD THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED (1015.2.2, 1015.2.1 EXCEPTION 2)
7. EGRESS THROUGH AN INTERVENING SPACE SHALL BE ALLOWED WHERE ADJOINING ROOMS AND THE AREA SERVED ARE ACCESSORY TO ONE ANOTHER (1014.2.1)
8. MECHANICAL ROOM 1304 TO BE INCIDENTAL USE SPACE ONLY.

FIRE RATING LEGEND

- SMOKE PARTITION - WALL CONSTRUCTION
- 1 HOUR FIRE BARRIER - WALL CONSTRUCTION
- 2 HOUR FIRE WALL - WALL CONSTRUCTION
- PATH OF TRAVEL TO EXIT
- COMMON PATH OF TRAVEL TO EXIT

OCCUPANCY/EGRESS LEGEND

Mark	Minimum Egress Requirements (Table 1004.1.1)	Occupant Load Factor	Total Occupants
LEVEL 01			
ST	Accessory Storage Areas, Mechanical, Equipment Room	300	32
AC	Assembly - Concetrated (chairs only - not fixed)	7	771
AU	Assembly - Unconcentrated (tables and chairs)	15	18
BU	Business Areas	150	31
CL	Educational - Classrooms	20	744
ES	Educational - Shops and Vocational Areas	50	86
KT	Kitchens, Commercial	200	10
LK	Locker Rooms	50	2
			1694
LEVEL 02			
ST	Accessory Storage Areas, Mechanical, Equipment Room	300	20
AU	Assembly - Unconcentrated (tables and chairs)	15	20
BU	Bowling Centers (Allow 5 persons for each lane incl. 15 ft of runway and for add'l areas	150	4
BU	Business Areas	150	23
CL	Educational - Classrooms	20	737
ES	Educational - Shops and Vocational Areas	50	46
LR	Library - Reading Rooms	50	45
			895
Grand total			2589

DESIGN DATA

GOVERNING BUILDING CODES:
IBC 2021; ANSI 117-1 2017; NFPA 101 LIFE SAFETY 2019; IMC 2021; IPC 2021; IECC 2021, for commercial projects; IFGC 2021; NEC 2020

PROJECT DESCRIPTION: TWO STORY ELEMENTARY SCHOOL

OCCUPANCY TYPE - CH.3
- E - EDUCATIONAL (SECTION 305)

CONSTRUCTION TYPE - CH.6
- TYPE II-B (SECTION 602)

ALLOWABLE BUILDING HEIGHT: PER TABLE 504.3: **75** FEET
- **ACTUAL HEIGHT** - 34'-8"

ALLOWABLE STORIES ABOVE GRADE PLANE: PER TABLE 504.4: **3** STORIES
- **ACTUAL STORIES** - 2

BUILDING AREA: PER TABLE 506.2
- BUILDING IS OVER ALLOWABLE AREA FOR ONE BUILDING, IT HAS BEEN SEPARATED INTO (2) SEPARATE AND DISTINCT BUILDINGS BY FIREWALLS PER IBC 706.
- TOTAL COMBINED BUILDING AREA - 108,830 SF

- FIRE AREA 'A' - SINGLE OCCUPANCY, MULTISTORY BUILDINGS (506.2.1) WITH NONSEPARATED OCCUPANCIES (508.3) USING AN OCCUPANCY CLASSIFICATION OF E (FIRE AREA 'A' HAS OCCUPANCY CLASSIFICATIONS OF A-1, A-3, B, E, S-1, S-2, AND U. A-3 IS NOT CONSIDERED A SEPARATE OCCUPANCY IN AN E BUILDING (303.1.3), RESULTING IN E AS THE MOST RESTRICTIVE CLASSIFICATION (508.3.1)). REFER TO TABLE "OCCUPANCY CLASSIFICATION" FOR OCCUPANCY BREAK DOWN.
  - TOTAL ALLOWABLE - 108,750 SF
  - EACH STORY ALLOWABLE - 54,375 SF
  - TOTAL ACTUAL - 84,281 SF*
  - MAIN LEVEL ACTUAL - 44,196 SF*
  - UPPER LEVEL ACTUAL - 40,085 SF*

  If = .75
  Open Space = 30' or Greater
  If = 1234'-5" / 1,513'-3" = .81, Table 506.3.3 .81 = .75
  Aa(2) = [43,500 + (14,500 x .75)] x 2 = 108,750
  Aa(1) = [43,500 + (14,500 x .75)] x 1 = 54,375

- FIRE AREA 'B' - SINGLE OCCUPANCY, MULTISTORY BUILDINGS (506.2.1) WITH NONSEPARATED OCCUPANCIES (508.3) USING AN OCCUPANCY CLASSIFICATION OF E (FIRE AREA 'A' HAS OCCUPANCY CLASSIFICATIONS OF A-2, A-3, B, E, F-1, AND S-1. A-3 IS NOT CONSIDERED A SEPARATE OCCUPANCY IN AN E BUILDING (303.1.3), RESULTING IN E AS THE MOST RESTRICTIVE CLASSIFICATION (508.3.1)). REFER TO TABLE "OCCUPANCY CLASSIFICATION" FOR OCCUPANCY BREAK DOWN.
  - TOTAL ALLOWABLE - 101,500 SF
  - EACH STORY ALLOWABLE - 50,750 SF
  - TOTAL ACTUAL - 15,659 SF*
  - MAIN LEVEL ACTUAL - 15,659 SF*
  - UPPER LEVEL ACTUAL - 0 SF*

  If = .5
  Open Space = 30' or Greater
  If = 270'-9.6" / 501'-8.04" = .53, Table 506.3.3 .53 = .5
  Aa(2) = [43,500 + (14,500 x .5)] x 2 = 101,500
  Aa(1) = [43,500 + (14,500 x .5)] x 1 = 50,750

INCIDENTAL USE AREAS: PER TABLE 509.1

PROTECTION: PER SECTION 509.4.2
- Where Table 509 permits an automatic sprinkler system without a fire barrier, the incidental uses shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. Doors shall be self- or automatic-closing upon detection of smoke in accordance with Section 716.2.6.6. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80. Walls surrounding the incidental use shall not have air transfer openings unless provided with smoke dampers in accordance with Section 710.8.

FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:
PER TABLE 601
- PRIMARY STRUCTURAL FRAME - 0* HOUR
- BEARING WALLS
  - EXTERIOR - 0 HOUR
  - INTERIOR - 0 HOUR
- NON-BEARING WALLS & PARTITION
  - INTERIOR - 0 HOUR
- FLOOR CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS - 0 HOUR
- ROOF CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS - 0* HOUR

AUTOMATIC SPRINKLER SYSTEM: PER SECTION 903 - YES

DESIGN OCCUPANCY LOAD: PER SECTION 1004
- MAIN LEVEL - 1,661 OCCUPANTS
- UPPER LEVEL - 881 OCCUPANTS
- TOTAL COMBINED - 2,542 OCCUPANTS

EGRESS WIDTH FOR OCCUPANCY SERVED: PER 1005
- REQUIRED STAIR WIDTH: 881 OCCS. x 0.3 = 265"
- TOTAL STAIR WIDTH PROVIDED: 558"

- MAIN LEVEL: 1,661 OCCS. x 0.2 = 333"
- UPPER LEVEL: 881 OCCS. x 0.2 = 177"
- MAIN LEVEL PROVIDED: xxxx"

EXIT ACCESS - CH. 10

COMMON PATH OF EGRESS TRAVEL: PER TABLE 1006.2.1 - 75 FEET

2 EXITS REQUIRED - PER 1006.3.2
- WHERE THE OCCUPANCY LOAD TOTALS MORE THAN 50
- PLACE FAR ENOUGH APART - NOT LESS THAT 1/2 MAXIMUM DIAGONAL DIMENSION OF AREA SERVED (MEASURED STRAIGHT LINE BETWEEN EXITS)

THROUGH INTERVENING SPACES PER 1016.2
- PERMITTED WHERE ADJOINING ROOMS OR AREAS ACCESSORY TO THE AREAS SERVED, IS NOT HIGH HAZARD OCCUPANCY, AND PROVIDE A DISCERNIBLE PATH OF EGRESS TRAVEL TO AN EXIT.

TRAVEL DISTANCE: PER TABLE 1017.2
- WITH SPRINKLER SYSTEM - **250'** MAXIMUM LENGTH OF EXIT ACCESS TRAVEL

CORRIDOR FIRE RESISTANCE RATING: PER TABLE 1020.2
WITH SPRINKLER SYSTEM - **0** HOUR FIRE RATED CONSTRUCTION

MINIMUM CORRIDOR WIDTH: PER TABLE 1020.3 IN INCHES
- 44" UNLESS NOTED OTHERWISE
- 36" WITH AN OCCUPANT LOAD OF LESS THAN 50
- 72" GROUP E WITH OCCUPANT LOAD OF 100 OR MORE

DEAD ENDS: PER 1020.5, EXCEPTION 2
- 50'-0" GROUP E WITH AUTOMATIC SPRINKLER SYSTEM

INTERIOR WALL & CEILING FINISH REQUIREMENTS: PER TABLE 803.13
- IN SPRINKLERED BUILDING
  - EXIT ENCLOSURES AND EXIT PASSAGEWAYS - CLASS B
  - CORRIDORS AND OTHER EXIT WAYS - CLASS C
  - ROOMS AND ENCLOSED SPACES - CLASS C^a

INTERIOR FLOORS FINISH: PER 804
- IN SPRINKLERED BUILDING - CLASS I & II

FIRE AREAS

NAME	AREA
FIRE AREA 'A'	
LEVEL 01	**44,196 SF**
LEVEL 02	**44,085 SF**
	88,281 SF
FIRE AREA 'B'	
LEVEL 01	**15,659 SF**
LEVEL 02	**0 SF**
	15,659 SF

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
BRENDON W. WALKER
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

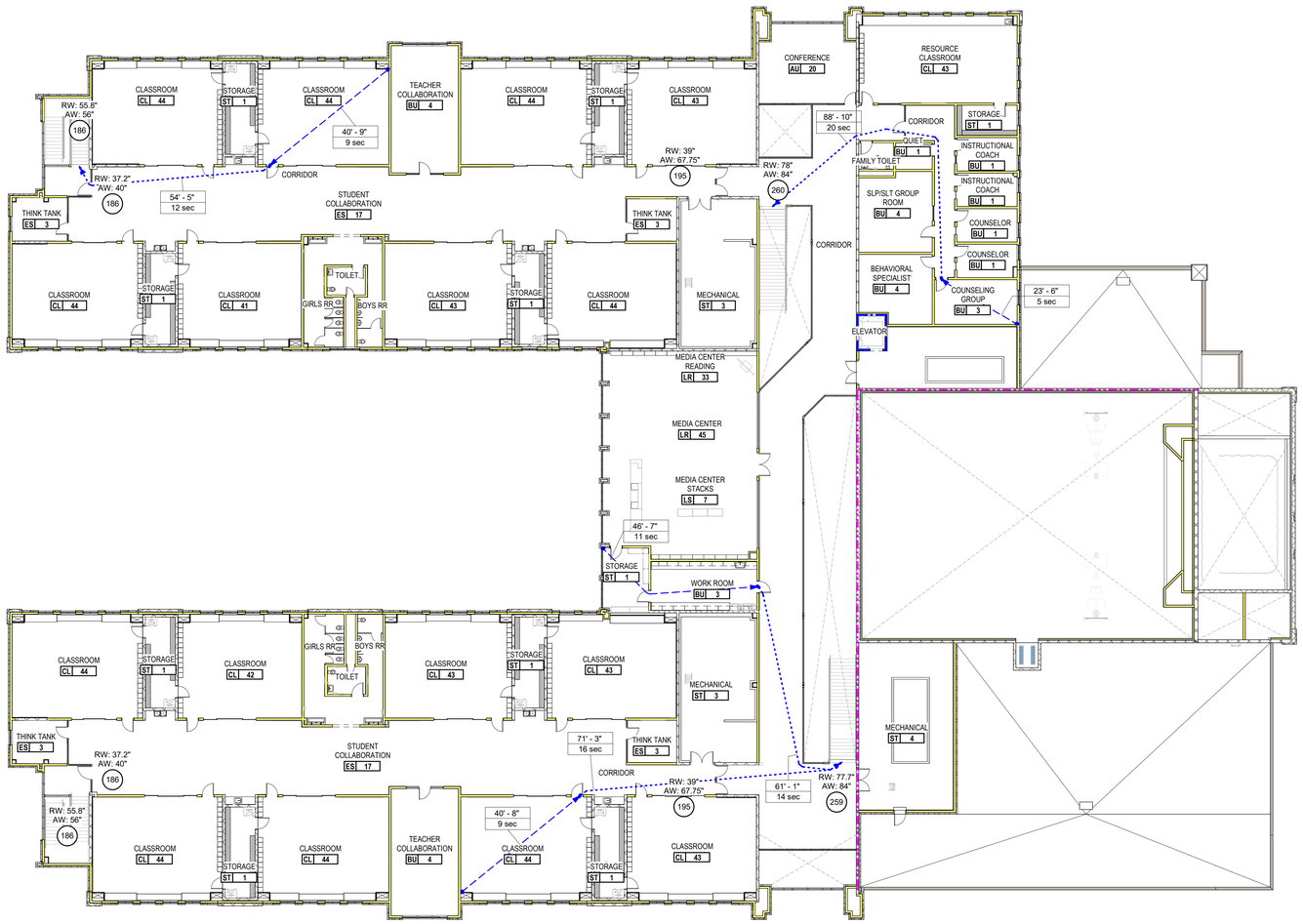
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

CODE + LIFE SAFETY

G101

11/8/2023 10:37:43 PM



A1 LEVEL 02 - CODE & LIFE SAFETY PLAN

SCALE: 1/16" = 1'-0"

PLUMBING FIXTURE ANALYSIS

IBC 2021 2902.1		
OCCUPANCY TYPE	**E**	
TOTAL APPLICABLE S.F. OCCUPANT LOAD FACTOR TOTAL # OF OCCUPANTS OCCUPANTS CALCULATED FROM SF DIVIDE BY 2	**108,830** **XX** **2,539** **1,659** **830**	 REFER TO TABLE BELOW EA. MALE & FEMALE
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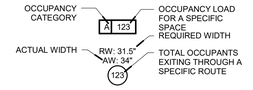
FEMALE (1:50) MALE (1:50) URINALS (67% of WC in A and E, 50% all other occupancies)	**17** **29** **17** **16** **13**	REQUIRED PROVIDED REQUIRED WC PROVIDED URINAL PROVIDED
LAVATORIES		
FEMALE (1:50) MALE (1:50)	**17** **26** **17** **26**	REQUIRED PROVIDED REQUIRED PROVIDED
DRINKING FOUNTAINS (HIGH/LOW PER IPC 2021 410.3)		
1:**50** (50% may be water coolers or bottled water per IPC 2021 410.3.2 Substitution)	**17** **19**	REQUIRED PROVIDED
SERVICE SINK		
	1 **3**	REQUIRED PROVIDED

OCCUPANCY/EGRESS SYMBOLS



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7. EGRESS THROUGH AN INTERVENING SPACE SHALL BE ALLOWED WHERE ADJOINING ROOMS AND THE AREA SERVED ARE ACCESSORY TO ONE ANOTHER (1014.2.1)
8. MECHANICAL ROOM 1304 TO BE INCIDENTAL USE SPACE ONLY.

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- 1 HOUR FIRE BARRIER - WALL CONSTRUCTION
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LK	Locker Rooms	50	2
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ST	Accessory Storage Areas, Mechanical, Equipment Room	300	20
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Grand total			2589

DESIGN DATA

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IBC 2021; ANSI 117-1 2017; NFPA 101 LIFE SAFETY 2019; IMC 2021; IPC 2021; IECC 2021, for commercial projects; IFGC 2021; NEC 2020

PROJECT DESCRIPTION: TWO STORY ELEMENTARY SCHOOL

OCCUPANCY TYPE - CH.3
- E - EDUCATIONAL (SECTION 305)

CONSTRUCTION TYPE - CH.6
- TYPE II-B (SECTION 602)

ALLOWABLE BUILDING HEIGHT: PER TABLE 504.3: **75** FEET
- **ACTUAL HEIGHT** - 34'-8"

ALLOWABLE STORIES ABOVE GRADE PLANE: PER TABLE 504.4: **3** STORIES
- **ACTUAL STORIES** - 2

BUILDING AREA: PER TABLE 506.2
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  - TOTAL ALLOWABLE - 108,750 SF
  - EACH STORY ALLOWABLE - 54,375 SF
  - TOTAL ACTUAL - 84,281 SF*
  - MAIN LEVEL ACTUAL - 44,196 SF*
  - UPPER LEVEL ACTUAL - 40,085 SF*

  If = .75
  Open Space = 30' or Greater
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- FIRE AREA 'B' - SINGLE OCCUPANCY, MULTISTORY BUILDINGS (506.2.1) WITH NONSEPARATED OCCUPANCIES (508.3) USING AN OCCUPANCY CLASSIFICATION OF E (FIRE AREA 'A' HAS OCCUPANCY CLASSIFICATIONS OF A-2, A-3, B, E, F-1, AND S-1. A-3 IS NOT CONSIDERED A SEPARATE OCCUPANCY IN AN E BUILDING (303.1.3), RESULTING IN E AS THE MOST RESTRICTIVE CLASSIFICATION (508.3.1)). REFER TO TABLE "OCCUPANCY CLASSIFICATION" FOR OCCUPANCY BREAK DOWN.
  - TOTAL ALLOWABLE - 101,500 SF
  - EACH STORY ALLOWABLE - 50,750 SF
  - TOTAL ACTUAL - 15,659 SF*
  - MAIN LEVEL ACTUAL - 15,659 SF*
  - UPPER LEVEL ACTUAL - 0 SF*

  If = .5
  Open Space = 30' or Greater
  If = 270'-9.6" / 501'-8.04" = .53, Table 506.3.3 .53 = .5
  Aa(2) = [43,500 + (14,500 x .5)] x 2 = 101,500
  Aa(1) = [43,500 + (14,500 x .5)] x 1 = 50,750

INCIDENTAL USE AREAS: PER TABLE 509.1

PROTECTION: PER SECTION 509.4.2
- Where Table 509 permits an automatic sprinkler system without a fire barrier, the incidental uses shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. Doors shall be self- or automatic-closing upon detection of smoke in accordance with Section 716.2.6.6. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80. Walls surrounding the incidental use shall not have air transfer openings unless provided with smoke dampers in accordance with Section 710.8.

FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:
PER TABLE 601
- PRIMARY STRUCTURAL FRAME - 0* HOUR
- BEARING WALLS
  - EXTERIOR - 0 HOUR
  - INTERIOR - 0 HOUR
- NON-BEARING WALLS & PARTITION
  - INTERIOR - 0 HOUR
- FLOOR CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS - 0 HOUR
- ROOF CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS - 0* HOUR

AUTOMATIC SPRINKLER SYSTEM: PER SECTION 903 - YES

DESIGN OCCUPANCY LOAD: PER SECTION 1004
- MAIN LEVEL - 1,661 OCCUPANTS
- UPPER LEVEL - 881 OCCUPANTS
- TOTAL COMBINED - 2,542 OCCUPANTS

EGRESS WIDTH FOR OCCUPANCY SERVED: PER 1005
- REQUIRED STAIR WIDTH: 881 OCCS. x 0.3 = 265"
- TOTAL STAIR WIDTH PROVIDED: 556"

- MAIN LEVEL: 1,661 OCCS. x 0.2 = 333"
- UPPER LEVEL: 881 OCCS. x 0.2 = 177"
- MAIN LEVEL PROVIDED: xxxx"

EXIT ACCESS - CH. 10

COMMON PATH OF EGRESS TRAVEL: PER TABLE 1006.2.1 - 75 FEET

2 EXITS REQUIRED - PER 1006.3.2
- WHERE THE OCCUPANCY LOAD TOTALS MORE THAN 50
- PLACE FAR ENOUGH APART - NOT LESS THAT 1/2 MAXIMUM DIAGONAL DIMENSION OF AREA SERVED (MEASURED STRAIGHT LINE BETWEEN EXITS)

THROUGH INTERVENING SPACES PER 1016.2
- PERMITTED WHERE ADJOINING ROOMS OR AREAS ACCESSORY TO THE AREAS SERVED, IS NOT HIGH HAZARD OCCUPANCY, AND PROVIDE A DISCERNIBLE PATH OF EGRESS TRAVEL TO AN EXIT.

TRAVEL DISTANCE: PER TABLE 1017.2
- WITH SPRINKLER SYSTEM - **250'** MAXIMUM LENGTH OF EXIT ACCESS TRAVEL

CORRIDOR FIRE RESISTANCE RATING: PER TABLE 1020.2
WITH SPRINKLER SYSTEM - **0** HOUR FIRE RATED CONSTRUCTION

MINIMUM CORRIDOR WIDTH: PER TABLE 1020.3 IN INCHES
- 44" UNLESS NOTED OTHERWISE
- 36" WITH AN OCCUPANT LOAD OF LESS THAN 50
- 72" GROUP E WITH OCCUPANT LOAD OF 100 OR MORE

DEAD ENDS: PER 1020.5, EXCEPTION 2
- 50'-0" GROUP E WITH AUTOMATIC SPRINKLER SYSTEM

INTERIOR WALL & CEILING FINISH REQUIREMENTS: PER TABLE 803.13
- IN SPRINKLERED BUILDING :
  - EXIT ENCLOSURES AND EXIT PASSAGEWAYS - CLASS B
  - CORRIDORS AND OTHER EXIT WAYS - CLASS C
  - ROOMS AND ENCLOSED SPACES - CLASS C[a]

INTERIOR FLOORS FINISH: PER 804
- IN SPRINKLERED BUILDING - CLASS I & II

FIRE AREAS

NAME	AREA
FIRE AREA 'A'	
LEVEL 01	**44,196 SF**
LEVEL 02	**44,085 SF**
	88,281 SF
FIRE AREA 'B'	
LEVEL 01	**15,659 SF**
LEVEL 02	**0 SF**
	15,659 SF

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VCBO NUMBER: 22785
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DATE: NOVEMBER 08 2023

STATE OF UTAH · JASON R. VANDEN BERG · 7067969 · LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

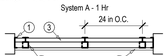
CODE + LIFE SAFETY

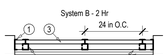
G102

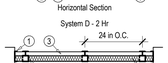
11/8/2023 10:37:49 PM

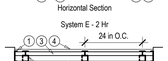
UL DESIGN No. U415 - 1, 2, 3 OR 4 HR SHAFT WALL

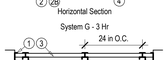
Design No. U415
Nonbearing Wall Ratings — 1, 2, 3 or 4 Hr

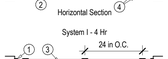












1. Floor, Side and Ceiling Runners — "J" - shaped runner, min 2-1/2 in. deep (min 4 in. deep when System C is used), with unequal legs of 1 in. and 2 in., fabricated from min 25 MSG (min 20 MSG when 4A, 4B, 4C, 4D or 7 are used) galv steel. Runners positioned with short leg toward finished side of wall. Runners attached to structural supports with steel fasteners located not greater than 2 in. from ends and not greater than 24 in. OC. "E" - shaped studs (Item 2A) may be used as side runners in place of "J" - shaped runners.

2. Steel Studs — "C-H" - shaped studs, min 2-1/2 in. deep (min 4 in. deep when System C is used), fabricated from min 25 MSG (min 20 MSG when Items 2D, 4A, 4B, 4C, 4D or 7 is used) galv steel. Cut to lengths 3/8 to 1/2 in. less than floor-to-ceiling height and spaced 24 in. or 600 mm OC (max 16 in. OC when Items 4A, 4B, 4C, or 4D are used).

2A. Steel Studs — (Not Shown) — "E" - shaped studs installed back to back in place of "C-H" - shaped studs (Item 2) "E" - shaped studs secured together with steel screws spaced a maximum 12 in. OC. Fabricated from min 25 MSG (min 20 MSG when Item 2D, 4A, 4B or 7 is used) galv steel, min 2-1/2 in. deep (min 4 in. deep when System C is used), with one leg 1 in. long and two legs 3/4 in. long. Shorter legs 1 in. apart to engage gypsum liner panels. Cut to lengths 3/8 to 1/2 in. less than floor to ceiling heights.

2B. Furring Channels — (Optional, not shown) — For use with single or double layer systems. Resilient furring channels fabricated from min 25MSG corrosion protected steel, installed horizontally, and spaced vertically a max 24 in. OC. Flange portion of channel attached to each interlocking "C-H" or "E" stud on side of stud opposite the 1 in. liner panels with 1/2 in. long Type S or S-12 pan-head steel screws. When furring channels are used, wallboard to be installed vertically only. Not to be used with Type FRX-G gypsum wallboard, Type RB-LBG (Item 4A), Type Nelco (Item 4B) or cementitious backer units (Item 7).

2C. Furring Channels — For use with System I - "Hat" - shaped, 25 MSG galv steel furring channels attached directly over the inner layers of wallboard to each stud with 2 in. long Type S pan head steel screws. Screws alternate from top flange to bottom flange at each stud intersection. Furring channels spaced vertically max 24 in. OC.

2D. Steel Framing Members* — (Optional, not shown) — For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FRX-G gypsum wallboard, Type RB-LBG (Item 4A), Type Nelco (Item 4B) or cementitious backer units (Item 7):

a. **Furring Channels** — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board installed vertically only and attached to furring channels as described in Item 4.

b. **Steel Framing Members*** — Used to attach furring channels (Item 2Da) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC, and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75)

2E. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below. . Not to be used with Type FRX-G gypsum wallboard, Type RB-LBG (Item 4A), Type Nelco (Item 4B), Type X-Ray Shielded Gypsum (Item 4C), Type RPP-Lead Lined Drywall (Item 4F) or cementitious backer units (Item 7).

a. **Furring Channels** — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire.Gypsum board attached to furring channels as described in Item 4.

b. **Steel Framing Members*** — Used to attach furring channels (Item 2Ea) to studs. Clips spaced 24 in. OC., and secured to studs with 1 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

2F. Steel Framing Members* — (Optional, Not Shown) — For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FRX-G gypsum wallboard, Type RB-LBG (Item 4A), Type Nelco (Item 4B) or cementitious backer units (Item 7):

a. **Furring Channels** — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board installed vertically only and attached to furring channels as described in Item 3.

b. **Steel Framing Members*** — Used to attach furring channels (Item 2Da) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC. GENIECLIPS secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips.
PLITEQ INC — Type GENIECLIP

2G. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: Not to be used with Type FRX-G gypsum wallboard, Type RB-LBG (Item 4A), Type Nelco (Item 4B), Type X-Ray Shielded Gypsum (Item 4C), Type RPP-Lead Lined Drywall (Item 4F) or cementitious backer units (Item 7):

a. **Furring Channels** — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 2Gb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.

b. **Steel Framing Members*** — Used to attach furring channels (Item 2Ga) to studs. Clips spaced 24 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
REGUPOL AMERICA — Type SonusClip

2H. Steel Framing Members* — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below. Not to be used with Type FRX-G gypsum wallboard, Type RB-LBG (Item 4A), Type Nelco (Item 4B), Type X-Ray Shielded Gypsum (Item 4C), Type RPP-Lead Lined Drywall (Item 4F) or cementitious backer units (Item 7):.

a. **Resilient Channels** — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 4.

b. **Steel Framing Members*** — Used to attach resilient channels (Item 2Ha) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.
KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

3. Gypsum Board* — Gypsum liner panels, nom 1 in. thick, 24 in. or 600 mm (for metric spacing) wide. Panels cut 1 in. less in length than floor to ceiling height. Vertical edges inserted in "H" portion of "C-H" studs or the gap between the two 3/4 in. legs of the "E" studs. Free edge of end panels attached to long leg of vertical "J" - runners with 1-5/8 in. long Type S steel screws spaced not greater than 12 in. OC. When wall height exceeds liner panel length, liner panel may be butted to extend to the full height of the wall. Horizontal joints need not be backed by steel framing. In System I, butt joints in liner panels are staggered min 36 in. Butt joints backed with 6 in. by 22 in. strips of 3/4 in. thick gypsum wallboard (Item 4). Wallboard strips centered over butt joints and secured to liner panels with six 1-1/2 in. long Type G steel screws, three screws along the 22 in. dimension at the top and bottom of the strips.

CGC INC — Type SLX
UNITED STATES GYPSUM CO — Type SLX
USG BORAL DRYWALL SFZ LLC — Type SLX
USG MEXICO S A DE C V — Type SLX

4. Gypsum Board* —**

Systems A - 1 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type S steel screws spaced 12 in. when installed vertically or 8 in OC when installed horizontally. Horizontal joints need not be backed by steel framing.

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX
UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, WRC, WRX, USGX. When ULIX is used insulation, Item 6, **Batts and Blankets*** is required and minimum stud depth is 4 in.
USG BORAL DRYWALL SFZ LLC — Types C, SCX, SGX, USGX
USG MEXICO S A DE C V — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

Systems B - 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in two layers. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 1-5/8 in. long Type S steel screws spaced 12 in. OC when installed vertically and staggered 12 in. from base layer screws or 8 in. OC when installed horizontally and staggered 8 in. from base layer screws. Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in.

CGC INC — 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX
UNITED STATES GYPSUM CO — 1/2 in. Types C, IP-X2, IPC-AR, or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULX, USGX, WRC, WRX
USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, USGX
USG MEXICO S A DE C V — 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

System C — 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 3/4 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, secured with 1-1/4 in. long Type S steel screws spaced 8 in. OC along vertical edges and 12 in. OC in the field when installed vertically or 8 in. OC along the vertical edges and in the field when installed horizontally. Horizontal joints need not be backed by steel framing. Screws along side joints offset 4 in. Requires min 4 in. deep framing per Items 1, 2 and 3. Requires min 3 in. thick mineral wool batts per Item 6.

CGC INC — Types IP-X3 or ULTRACODE
UNITED STATES GYPSUM CO — Types IP-X3 or ULTRACODE
USG BORAL DRYWALL SFZ LLC — Type ULTRACODE
USG MEXICO S A DE C V — Types IP-X3 or ULTRACODE

System D — 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached directly to studs with 1 in. long Type S steel screws spaced 24 in. when installed vertically or 16 in. OC when installed horizontally. Horizontal joints need not be backed by steel framing. Requires face layer of 1/2 or 5/8 in. thick cementitious backer units per Item 7 and min 1-1/2 in. thick mineral wool batts per Item 6.

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX
UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, WRC, WRX
USG BORAL DRYWALL SFZ LLC — Types C, SCX, SGX, USGX
USG MEXICO S A DE C V — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

System E — 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type S steel screws spaced 12 in. OC when installed vertically or 8 in. when installed horizontally. Horizontal joints need not be backed by steel framing.

CGC INC — 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX
UNITED STATES GYPSUM CO — 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, WRC, WRX
USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, USGX
USG MEXICO S A DE C V — 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

System F — 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically in two layers. Inner or base layer attached to resilient furring channels (Item 2B) with 1 in. long Type S steel screws spaced 24 in. Outer or face layer attached to resilient furring channels (Item 2B) with 1-5/8 in. long Type S steel screws spaced 12 in. OC and staggered 12 in. from base layer screws. Joints between inner and outer layers staggered 24 in.

CGC INC — 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX
UNITED STATES GYPSUM CO — 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, WRC, WRX
USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX
USG MEXICO S A DE C V — 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

System G — 3 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in three layers. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in OC when installed horizontally. Middle layer attached to studs with 1-5/8 in. long Type S steel screws spaced 24 in. when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 2-1/4 in. long Type S steel screws spaced 16 in. when installed vertically or 12 in. OC when installed horizontally. Screws offset 6 in. from layer below. Horizontal joints on adjacent layers staggered a min of 12 in.. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent layers.

CGC INC — Types C, IP-X2, IPC-AR, WRC
UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR, WRC
USG BORAL DRYWALL SFZ LLC — Type C
USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR, WRC

System H — 3 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, two layers over the flange of the "C" section of the studs, one layer over the flange of the "H" section of the studs. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Face layer attached to studs with 1-5/8 in. long Type S steel screws spaced 16 in. when installed vertically or 12 in. OC when installed horizontally. Screws offset 6 in. from layer below. Horizontal joints on adjacent layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent layers.

CGC INC — Types C, IP-X2, IPC-AR, WRC
UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR, WRC
USG BORAL DRYWALL SFZ LLC — Type C
USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR, WRC

System I — 4 Hr

Gypsum panels, with beveled, square or tapered edges, nom 3/4 in. thick, 4 ft wide (or 1200 mm for metric spacing) wallboard with square or tapered edges. Total of four layers to be used. First and second (inner) layers applied vertically or horizontally over the steel studs. Horizontal joints need not be backed by steel framing. When applied vertically, joints centered over studs and staggered min 24 in., otherwise all joints staggered min 12 in. First layer secured to studs with 1-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 24 in. OC. Second layer secured to studs with 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. Third layer applied vertically over the furring channels (Item 2C) with a 1-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. Fourth layer applied vertically or horizontally with 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. When applied vertically, joints to be staggered min 24 in. from third layer, otherwise all joints staggered min 12 in.

CGC INC — Types IP-X3 or ULTRACODE
UNITED STATES GYPSUM CO — Types IP-X3 or ULTRACODE
USG BORAL DRYWALL SFZ LLC — Type ULTRACODE
USG MEXICO S A DE C V — Types IP-X3 or ULTRACODE

4A. Gypsum Board* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nom 5/8 in. or 3/4 in. thick laid backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1, 2, 2A, 2B and 2D. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Leaded Batten Strips (see Item 9) or Lead Discs or Tabs (see Item 10).
RAY-BAR ENGINEERING CORP — Type RB-LBG

4B. Gypsum Board* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nominal 5/8 in. thick laid backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or #6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field.
NEW ENGLAND LEAD BURNING CO INC, DBA NELCO — Type Nelco

4C. Gypsum Board* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nom 5/8 or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1, 2, 2A, 2B and 2D. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 9A) or Lead Discs (see Item 10A). Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip.
MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

4D. Gypsum Board* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nom 5/8 in. thick laid backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".
RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

5. Joint Tape and Compound — (Not Shown)

Systems A, B, C, E, F, G, H, I

Joints on outer layers of gypsum boards (Item 4 and 4A) covered with paper tape and joint compound. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. Exposed screw heads covered with joint compound.

6. Batts and Blankets* —**

(Optional) — Mineral wool or glass fiber batts partially or completely filling stud cavity. Any mineral wool or glass fiber batt mineral bearing the UL Classification Marking as to Fire Resistance.

Systems A, B, E, F, G, H, I

Placed in stud cavities, any min. 3-1/2 in. thick glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

Systems C & D

Min 3 in. (System C) and min 1-1/2 in. (System D) thick mineral wool batts, friction fitted between the studs and floor and ceiling runners.

ROCKWOOL — Type AFB
THERMAFIBER INC — Type SAFB, SAFB FF

7. Cementitious Backer Units* —** (System D) — Nom 1/2 or 5/8 in. thick panels, square edge, attached to studs over gypsum wallboard with 1-5/8 in. long, Type S-12, corrosion resistant steel screws spaced 8 in. OC and staggered 8 in. from gypsum wall board screws. Joints covered with glass fiber mesh tape. Vertical joints staggered one stud cavity from gypsum wallboard joints. Horizontal joints staggered a min of 12 in. from the gypsum wallboard joints.

UNITED STATES GYPSUM CO — Type DCB

8. Laminating Adhesive* —** (Optional, Not Shown) — Used to bond outer layer of Cementitious Backer Units (Item 7) to inner layers of Gypsum Board (Item 4) in System D. ANSI A136.1 Type 1 organic adhesive applied with 1/4 in. square notched trowel. See Adhesives (BYWR) in the Fire Resistance Directory or Adhesives (BJLZ) in the Building Materials Directory for names of Classified companies.

9. Lead Batten Strips — (Not Shown, For Use With Item 4A) — Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4A) and optional at remaining stud locations. Required behind vertical joints.

9A. Lead Batten Strips — (Not Shown, for use with Item 4C) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grades "B, C or D". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4A) and optional at remaining stud locations. Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4B) and optional at remaining stud locations. Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4C) and optional at remaining stud locations. Required behind vertical joints.

10. Lead Discs or Tabs — (Not Shown, For Use with Item 4A) — Used in lieu of or in addition to the lead batten strips (Item 9) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 4A) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

10A. Lead Discs — (Not Shown, for use with Item 4C) — Max 5/16 in. diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.5% meeting the Federal Specification QQ-L-201f, Grades "B, C or D".

11. Lead Batten Strips — (Not Shown, For Use With Item 4B) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4B) and optional at remaining stud locations.

12. Lead Tabs — (Not Shown, For Use With Item 4B) — 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 4B) will penetrate the steel stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

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Last Updated on 2018-09-27

UL DESIGN No. U419 - 1, 2, 3 OR 4 HR NON-BEARING WALL (SEE ITEMS 4 & 5 THROUGH 5K)

Design No. U419

1. Floor and Ceiling Runners — (Not Shown) — For use with Item 2 — Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.

1A. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2B, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max.
CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper25™ Track
CRACO MFG INC — SmartTrack25™
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper25™ Track
FUSION BUILDING PRODUCTS — Viper25™ Track
IMPERIAL MANUFACTURING GROUP INC — Viper25™ Track

1B. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2C, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™ Track
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track
FUSION BUILDING PRODUCTS — Viper20™ Track
IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track

1C. Framing Members* — Floor and Ceiling Runners — (Not Shown) — In lieu of Item 1 — Channel shaped, attached to floor and ceiling with fasteners 24 in. OC, max.
ALLSTEEL & GYPSUM PRODUCTS INC — Type SUPREME D24/30EQD and Type SUPREME D20

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME D24/30EQD and Type SUPREME D20
QUAIL RUN BUILDING MATERIALS INC — Type SUPREME D24/30EQD and Type SUPREME D20
SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME D24/30EQD and Type SUPREME D20
STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME D24/30EQD and Type SUPREME D20
UNITED METAL PRODUCTS INC — Type SUPREME D24/30EQD and Type SUPREME D20

1D. Floor and Ceiling Runners — (Not Shown) — For use with Item 2A — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners spaced max 24 in. OC.
1E. Framing Members* — Floor and Ceiling Runners — (Not Shown, As an alternate to Item 1) — For use with Items 2E, 5F or 5G or 5I only, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max.
CLARKDIETRICH BUILDING SYSTEMS — CD ProSTRAD
DMFCWBS L L C — ProTRAK
MBA METAL FRAMING — ProTRAK
RAM SALES L L C — Ram ProSTRAD
STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProSTRAD

1E. Framing Members* — Floor and Ceiling Runners — (Not Shown, As an alternate to Item 1) — For use with Items 2E, 5F or 5G or 5I only, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max.
CLARKDIETRICH BUILDING SYSTEMS — CD ProTRAK
DMFCWBS L L C — ProTRAK
MBA METAL FRAMING — ProTRAK
RAM SALES L L C — Ram ProTRAK
STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProTRAK

1F. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2F, proprietary channel shaped runners, minimum width to accommodate stud size, with 1- 1/8 in. long legs fabricated from min 0.015 in. (min bare metal thickness) galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
SUPER STUD BUILDING PRODUCTS — The Edge

1G. Framing Members* — Floor and Ceiling Runner — For use with Item 2G, proprietary channel shaped runners, minimum width to accommodate stud size attached to floor and ceiling with fasteners 24 in. OC max.
STUDCO BUILDING SYSTEMS — CROCSTUD Track

1H. Floor and Ceiling Runners — (Not Shown) — Channel shaped, fabricated from min 0.02 in. galv steel, min width to accommodate stud size, with min 1 in. long legs, for use with studs specified below and fabricated from min 0.018 in. galv steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track VT100
FUSION BUILDING PRODUCTS — Viper20™ Track VT100
IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track VT100

1I. Framing Members* — Floor and Ceiling Runners — (Not Shown, As an alternate to Item 1) — For use with Items 2H, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max.
TELLING INDUSTRIES L L C — TRUE-TRACK™

1J. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2I, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max.
TELLING INDUSTRIES L L C — Viper25™ Track

1K. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2J, proprietary channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
TELLING INDUSTRIES L L C — Viper20™ Track

1L. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2N, proprietary channel shaped runners, 1-1/4 in. wide by min. 3-1/2 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
STEEL INVESTMENT GROUP L L C — AlphaTRAK

UL DESIGN No. U419 (continued) - 1, 2, 3 OR 4 HR NON-BEARING WALL (SEE ITEMS 4 & 5 THROUGH 5K)

1M. Framing Members* — Floor and Ceiling Runners — Not Shown — As an alternate to Item 1 — For use with Item 2O, proprietary channel shaped runners, min width to accommodate stud size, galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
RONDO BUILDING SERVICES PTY LTD — Rondo Wall Track

**1

Firestop Schedule of Through Penetration Systems. Basis of Design: Hilti, Inc.

TYPE OF PENETRANT	F-RATING (HR)	CONCRETE FLOORS	CONCRETE OR BLOCK WALLS	GYPSUM WALLS	WOOD FLOORS	Hilti Products
		BASIS OF DESIGN UL SYSTEM		BASIS OF DESIGN UL SYSTEM		
CIRCULAR BLANK OPENINGS	1	F-A-0006, C-AJ-0055, C-AJ-0090	C-AJ-0055, C-AJ-0090	--	--	CP 680, CP 618, FS-ONE MAX, CFS-BL
	2	F-A-0006, C-AJ-0055, C-AJ-0090	C-AJ-0055, C-AJ-0090	--	--	
	3	F-A-0006, C-AJ-0055, C-AJ-0086, F-A-0014	C-AJ-0055, C-AJ-0086	--	--	
METAL PIPES OR CONDUIT	1	C-AJ-1226, F-A-1028, F-A-1017	C-AJ-1226, W-J-1067, W-J-1020	W-L-1054, W-L-1058, W-L-1164, W-L-1506	F-C-1009, F-C-1059, F-C-1168	CP 680, FS-ONE MAX, CP 606, CFS-S SIL GG, CFS-D, Mineral Wool
	2	C-AJ-1226, F-A-1028, F-A-1017	C-AJ-1226, W-J-1067, W-J-1020, W-J-1248	W-L-1054, W-L-1058, W-L-1164, W-L-1506	F-C-1009, F-C-1059, F-C-1168	
	3	C-AJ-1226, F-A-1017	C-AJ-1226, W-J-1041, W-J-1068	--	--	
	4	C-BJ -1037, C-BJ-1034	C-BJ-1034, C-BJ-1037, W-J-1041, W-J-1042, W-J-1068	W-L-1110, W-L-1111, W-L-1165	--	
NON-METALLIC PIPE OR CONDUIT (I.E. PVC, CPVC, ABS, FRP, ENT)	1	F-A-2053, F-A-2025, C-AJ-2109, C-AJ-2098, C-AJ-2271, C-AJ-2167, C-BJ-2021, C-AJ-2342	C-AJ-2109, C-AJ-2098, C-AJ-2167, C-AJ-2371, C-AJ-2342	W-L-2078, W-L-2075, W-L-2128	F-C-2232, F-C-2030, F-C-2160, F-C-2389	CP 680, CP 643N, Mineral Wool, CP 644, FS-ONE MAX, CFS-S SIL SL, CFS-S SIL GG, CP 648
	2	F-A 2053, F-A 2025, C-AJ-2109, C-AJ-2098, C-AJ-2271, C-AJ-2167, C-BJ-2021, C-AJ-2371, C-AJ-2342	C-AJ-2109, C-AJ-2098, C-AJ-2167, C-AJ-2371, C-AJ-2342	W-L-2078, W-L-2075, W-L-2128	F-C-2029, F-C-2030, F-C-2128, F-C-2160	
	3	F-A-2054, C-AJ-2109, C-AJ-2098, C-AJ-2371, C-AJ-2342	C-AJ-2109, C-AJ-2098, C-AJ-2371, C-AJ-2342	--	--	
	4	C-BJ-2016, C-AJ-2017	W-J-2057, W-J-2091	W-L-2184, W-L-2245	--	
SINGLE OR BUNDLED CABLES	1	F-A-3007,C-AJ-3095,C-AJ-3180, C-AJ-3283	W-J-3036, C-AJ-3095, C-AJ-3180, W-J-3060, W-J-3167	W-L-3065, W-L-3111, W-L-3112, W-L-3334, W-L-3414, W-L-3396	F-C-3012, F-C-3110, F-C-3044	CP 680, CP 653, FS-ONE MAX, CP 618, CP 606, CFS-D, CFS-CC
	2	F-A-3007,C-AJ-3095,C-AJ-3334, F-A-3060	W-J-3036, C-AJ-3095, C-AJ-3180, W-J-3060, W-J-3167, W-J-3189	W-L-3065, W-L-3111, W-L-3112, W-L-3334, W-L-3414, W-L-3396	F-C-3012, F-C-3110	
	3	F-A-3007, C-AJ 3095, C-AJ-3285	C-AJ-3095, C-AJ-3180, W-J-3167	--	--	
	4	N/A**	W-J-3050	W-L-3139, W-L-3334	--	
CABLE TRAY	1	C-AJ-4034, C-AJ-4035	W-J-4027, C-AJ-4034, C-AJ-4035	W-L-4011, W-L-4019, W-L-4081	--	CFS-BL, FS-ONE MAX, CP 620, CP 618
	2	C-AJ-4034, C-AJ-4035	W-J-4027, C-AJ-4034, C-AJ-4035	W-L-4011, W-L-4019, W-L-4081	--	
	3	C-AJ-4034, C-AJ-4035	C-AJ-4034, C-AJ-4035	W-L-3385, W-L-3277	--	
	4	N/A**	W-J-8007	W-L 8014	--	
INSULATED PIPES	1	F-A 5015, F-A 5017, C-AJ-5090, C-AJ-5091, C-AJ-5090, C-AJ-5048	C-AJ-5090, C-AJ-5091, C-AJ 5061, W-J-5042	W-L-5028, W-L-5029, W-L-5047	F-C-5004, F-C-5037, F-C-5036	CP 680, FS-ONE MAX, Mineral Wool
	2	F-A 5015, F-A 5017, C-AJ-5090, C-AJ-5091, C-AJ-5090	C-AJ-5090, C-AJ-5091, C-AJ-5061, W-J-5042	W-L-5028, W-L-5029, W-L-5047	F-C-5004, F-C-5037	
	3	F-A 5016, C-AJ-5090, F-A-5018	C-AJ-5090, C-AJ-5061	--	--	
	4	C-BJ-5006	C-BJ-5006, W-J-5028	W-L-5073	--	
ELECTRICAL BUSWAY	1	C-AJ-6006, C-AJ-6017, F-A-6002, C-AJ-6036	C-AJ-6006, C-AJ-6017, C-AJ-6036	--	--	CP 637, FS-ONE MAX, CP 620, CFS-BL, Mineral Wool, CFS-S SIl GG, CFS-S SIL SL
	2	C-AJ-6006, C-AJ-6017, F-A 6042, C-AJ-6036	C-AJ-6006, C-AJ-6017, C-AJ-6036	--	--	
	3	C-AJ-6006, C-AJ-6017	C-AJ-6006, C-AJ-6017	--	--	
MECHANICAL DUCTWORK WITHOUT DAMPERS (NON-INSULATED)	1	C-AJ-7046, C-AJ-7051, C-AJ-7084	C-AJ-7046, C-AJ-7051, W-J-7021, W-J-7022	W-L-7017, W-L-7040, W-L-7042, W-L-7155	F-C-7013	CFS-S SIL GG, CP 606, FS-ONE MAX
	2	C-AJ-7046, C-AJ-7051, C-AJ-7085	C-AJ-7046, C-AJ-7051, W-J-7021, W-J-7022	W-L-7040, W-L-7042, W-L-7155	--	
	3	C-AJ-7046, C-AJ-7051	C-AJ-7046, C-AJ-7051	--	--	
MECHANICAL DUCTWORK WITHOUT DAMPERS (INSULATED)	1	N/A**	W-J-7029, W-J-7124	W-L-7059, W-L-7153, W-L-7156, W-L-7151	N/A**	FS-ONE MAX, Mineral Wool
	2	N/A**	W-J-7091, W-J-7112, W-J-7124	W-L-7059, W-L-7153, W-L-7156, W-L-7151	N/A**	
MIXED PENETRANTS	1	C-AJ-8099, C-AJ-8056, C-AJ-8143	C-AJ-8099, C-AJ-8056, W-J-8007, C-AJ-8143	W-L-1095, W-L-8013	F-C-8009, F-C-8014, F-C-8026	FS-ONE MAX, CFS-BL, CP 620, CP 618
	2	C-AJ-8099, C-AJ-8056, C-AJ-8143, C-AJ-8252	C-AJ 8099, C-AJ-8056, W-J-8007, C-AJ-8143, C-AJ-8252	W-L-1095, W-L-8013	--	
	3	C-AJ-8099, C-AJ-8056	C-AJ-8041, C-AJ-8056, W-J-8007, C-AJ-8099	--	--	
	4	C-AJ-8095	C-AJ-8095, W-J-8007	W-L-8014	--	

**CONTACT HILTI FOR CURRENT UL-CLASSIFIED SYSTEM OR ENGINEERING JUDGMENT DRAWING: 800-879-6000

NOTES:

1. Jobsite conditions of each through-penetration firestop system must meet ALL details of the UL-Classified System selected.
2. If jobsite conditions do not match any UL-classified systems in the schedules above, contact Hilti for alternative systems or Engineer Judgment Drawings - 800-879-8000
3. Where more than one applicable UL-Classified System is listed in the schedules, choose the UL System which is most economical for each through-penetration firestop system.
4. Coordinate work with other trades to assure that penetration opening sizes are appropriate for penetrant locations, and vice versa.

VCBO®

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LAIE, HI

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SALT LAKE CITY, UT 84102
801.575.8800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

UL RATED COMMON THROUGH-PENETRATION FIRESTOP SYSTEMS

G202

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STRAIN RELIEF SYSTEMS, PERIMETER RELIEF, HEAD-OF-WALL, NONCOMBUSTIBLE

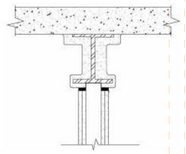
GA FILE NO. SRS 7206	GENERIC	2 HOUR FIRE	

STEEL RUNNER (TRACK), STEEL STUDS, FLEXIBLE SEALANT

Fire Design:

Steel floor and ceiling runners attached to steel beam. Minimum 3-1/2" deep steel studs cut 1/2" to 3/4" short and positioned into floor and ceiling runners. Gypsum board applied to the wall as specified in the listing for the one or two-hour fire-resistance rated system with a maximum gap of 5/8" between the top edge of gypsum boards and bottom spray-applied fire-resistive material and filled with smoke and sound barrier sealant. The first row of screws in each layer of gypsum panel is located not less than 1" below the edge of the drywall track applied to the ceiling.

The perimeter relief system is intended for use in any one or two-hour load-bearing or NLB fire-resistance rated steel stud wall system in this Manual. The wall system shall be constructed of the materials and in the manner described in the individual GA File Number.



** Contact the manufacturer for more detailed information on proprietary products*

Fire Test: UL R11822, 10CA41771, 9-2-10; UL Design HW-D-0627

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WALLS AND INTERIOR PARTITIONS, NONCOMBUSTIBLE

GA FILE NO. WP 1052	GENERIC	1 HOUR FIRE	50 to 54 STC SOUND

GYPSUM WALLBOARD, STEEL STUDS

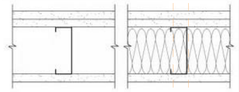
Fire Design:

One layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of 3-5/8", 18 mil steel studs 24" o.c. with 1" Type S screws 8" o.c. at vertical joints and 12" o.c. at wall perimeter and intermediate studs. **Face** layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to ONE SIDE with 1-5/8" Type S screws 12" o.c.

Joints staggered 24" each layer and side. **(NLB)**

Sound Design:

Sound tested with 3-1/2" glass fiber friction fit in stud space.



Thickness: 5-1/2" (Fire and Sound)
Approx. Weight: 8 psf (Fire and Sound)
Fire Test: See WP 1350 (FM WP-45, 6-19-68; OSU T-1770, 8-61; ULC 79T484, 79T500, 79T497, 8-21-81, ULC Design W415)
Sound Test: RAL-TL11-075, 3-23-11

** Contact the manufacturer for more detailed information on proprietary products.*

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WALLS AND INTERIOR PARTITIONS, NONCOMBUSTIBLE

GA FILE NO. WP 1072	GENERIC	1 HOUR FIRE	45 to 49 STC SOUND

GYPSUM WALLBOARD, STEEL STUDS

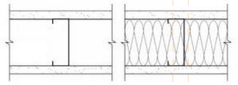
Fire Design:

One layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of 3-5/8", 18 mil steel studs 24" o.c. with 1" Type S screws 8" o.c. at vertical joints and 12" o.c. at floor and ceiling runners and intermediate studs.

Joints staggered 24" on each side and on OPPOSITE SIDES. **(NLB)**

Sound Design:

Sound tested with 3-1/2" glass fiber friction fit in stud space.



Thickness: 4-7/8" (Fire and Sound)
Approx. Weight: 6 psf (Fire and Sound)
Fire Test: See WP 1350 (FM WP-45, 6-19-68; OSU T-1770, 8-61; ULC 79T484, 9T500,79T497, 8-12-81, ULC Design W415)
Sound Test: RAL TL11-074, 3-23-11

** Contact the manufacturer for more detailed information on proprietary products.*

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WALLS AND INTERIOR PARTITIONS, NONCOMBUSTIBLE

GA FILE NO. WP 1522	GENERIC	2 HOUR FIRE	55 to 59 STC SOUND

GYPSUM WALLBOARD, STEEL STUDS

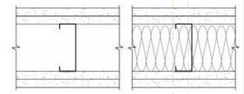
Fire Design:

Base layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of 3-5/8", 18 mil steel studs 24" o.c. with 1" Type S screws 24" o.c. **Face** layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side with 1-5/8" Type S screws 12" o.c.

Joints staggered 24" each layer and side. **(NLB)**

Sound Design:

Sound tested with 3-1/2" glass fiber friction fit in stud space.



Thickness: 6-1/8" (Fire and Sound)
Approx. Weight: 12 psf (Fire and Sound)
Fire Test: See WP 1548 (WHI-495-0236 & 237, 1-30-80)
Sound Test: NRCC TL-92-369

** Contact the manufacturer for more detailed information on proprietary products.*

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WALLS AND INTERIOR PARTITIONS, NONCOMBUSTIBLE

GA FILE NO. WP 1546	GENERIC	2 HOUR FIRE	50 to 54 STC SOUND

GYPSUM WALLBOARD, STEEL STUDS

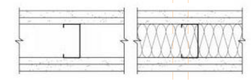
Fire Design:

Base layer 1/2" type X gypsum wallboard or gypsum veneer base applied parallel to each side of 2-1/2", 18 mil steel studs 24" o.c. with 1" Type S screws 24" o.c. **Face** layer 1/2" type X gypsum wallboard or gypsum veneer base applied parallel to each side with 1-5/8" Type S screws 12" o.c.

Joints staggered 24" each layer and side. **(NLB)**

Sound Design:

Sound tested with 2-1/2" glass fiber friction fit in stud space.



Thickness: 4-1/2" (Fire and Sound)
Approx. Weight: 9 psf (Fire and Sound)
Fire Test: UC, 9-7-64; ULC 80T499, 3-26-81, ULC Design W414
Sound Test: NRCC TL-93-046

** Contact the manufacturer for more detailed information on proprietary products.*

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DATE: NOVEMBER 08 2023

STATE OF UTAH
REGISTERED
7067069
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

GYPSUM ASSOCIATION RATED ASSEMBLIES

G209

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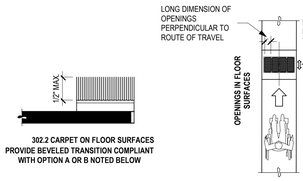
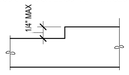
CHAPTER 3 BUILDING BLOCK: 302 FLOOR SURFACES



302.2 CARPET ON FLOOR SURFACES PROVIDE BEVELED TRANSITION COMPLIANT WITH OPTION A OR B NOTED BELOW

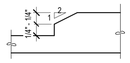
CHAPTER 3 BUILDING BLOCK: 303 CHANGES IN LEVEL

303.1 GENERAL.
CHANGES IN LEVEL IN FLOOR SURFACES SHALL COMPLY WITH SECTION 303.

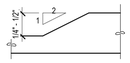


303.2 VERTICAL CHANGE IN LEVEL

303.2 VERTICAL.
CHANGES IN LEVEL OF 1/4" INCH MAXIMUM IN HEIGHT SHALL BE PERMITTED TO BE VERTICAL



303.3 BEVELED CHANGE IN LEVEL - OPTION A



303.3 BEVELED CHANGE IN LEVEL - OPTION B

303.3 BEVELED.
CHANGES IN LEVEL GREATER THAN 1/4" INCH IN HEIGHT AND NOT MORE THAN 1/2" INCH MAXIMUM IN HEIGHT SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2.

CHAPTER 3 BUILDING BLOCK: 304 TURNING SPACE

304.3.1.1 NEW BUILDINGS AND FACILITIES.
IN NEW BUILDING AND FACILITIES, THE TURNING SPACE SHALL BE A CIRCULAR SPACE WITH A 67-INCH MINIMUM DIAMETER.

FIGURE 304.3.1.1 CIRCULAR TURNING SPACE- NEW BUILDING AND OVERLAP

304.3.1.1.1 OVERLAP.
TURNING SPACES SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 306. WHERE THE TURNING SPACE INCLUDES KNEE AND TOE CLEARANCES UNDER AN OBSTRUCTION, THE OVERLAP SHALL COMPLY WITH ALL OF THE FOLLOWING:

1. THE DEPTH OF THE OVERLAP SHALL NOT BE MORE THAN 10 INCHES, AND
2. THE DEPTH SHALL NOT EXCEED THE DEPTH OF THE KNEE AND TOE CLEARANCES PROVIDED, AND
3. THE OVERLAP SHALL BE PERMITTED ONLY WITHIN THE TURNING CIRCLE AREA SHOWN SHADED IN 304.3.1.

304.3.2.1. NEW BUILDING AND FACILITIES.
IN NEW BUILDING AND FACILITIES, THE TURNING SPACE SHALL BE A T- SHAPED SPACE COMPLYING WITH ONE OF THE FOLLOWING:

1. A T-SHAPED SPACE, CLEAR OF OBSTRUCTION , THAT FITS WITHIN AN AREA 68 INCHES WIDE AND 60 INCHES DEEP, WITH TWO ARMS AND ONE BASE THAT ARE ALL 36 INCHES MINIMUM IN WIDTH . EACH ARM ARM SHALL EXTEND 16 INCHES MINIMUM FROM EACH SIDE OF THE BASE LOCATED OPPOSITE THE OTHER, AND THE BASE SHALL EXTEND 24 INCHES MINIMUM FROM THE ARMS. AT THE INTERSECTION OF EACH ARM AND THE BASE, THE INTERIOR CORNERS SHALL BE CHAMFERED FOR 8 INCHES MINIMUM ALONG BOTH THE ARM AND ALONG THE BASE.

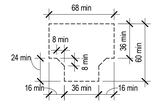


FIGURE 304.3.2.1(A) T-SHAPED TURNING SPACE NEW BUILDING - OPTION 1

2. A T-SHAPED SPACE, CLEAR OF OBSTRUCTION, THAT FITS WITHIN AN AREA 64 INCHES WIDE AND 60 INCHES DEEP, WITH TWO ARMS 38 INCHES MINIMUM IN WIDTH AND A BASE 42 INCHES MINIMUM IN WIDTH. EACH ARM SHALL EXTEND 11 INCHES MINIMUM FROM EACH SIDE OF THE BASE, LOCATED OPPOSITE THE OTHER, AND THE BASE SHALL EXTEND 22 INCHES MINIMUM FROM EACH ARM.

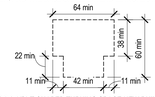


FIGURE 302.3.2.1(B) T-SHAPED TURNING SPACE NEW BUILDING - OPTION 2

3. A T-SHAPED SPACE, CLEAR OF OBSTRUCTION, 64 INCHES WIDE AND 60 INCHES DEEP, WITH TWO ARMS AND ONE BASE 40 INCHES MINIMUM IN WIDTH. EACH ARM SHALL EXTEND 12 INCHES MINIMUM FROM EACH SIDE OF THE BASE SHALL EXTEND 20 INCHES MINIMUM FROM EACH ARM.

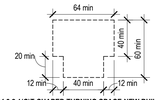


FIGURE 304.3.2.1(C)T-SHAPED TURNING SPACE NEW BUILDING- OPTION 3

304.3.2.1.1 OVERLAP
TURNING SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 306 OF EITHER THE BASE OR ONE ARM. FOR OPTION 1, THE BASE OR ARM IS THE PORTION BEYOND THE CHAMFER.

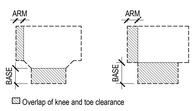


FIGURE 304.3.2.1.1 T-SHAPED TURNING SPACE NEW BUILDING - OVERLAP

CHAPTER 3 BUILDING BLOCKS: 305 CLEAR FLOOR SPACE

305.1 GENERAL.
A CLEAR FLOOR SPACE SHALL COMPLY WITH SECTION 305.

305.2 FLOOR SURFACE.
FLOOR SURFACES OF A CLEAR FLOOR SPACE SHALL COMPLY WITH SECTION 302.CHANGES IN LEVEL SHALL NOT BE PERMITTED WITHIN THE CLEAR FLOOR SPACE.

EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.

305.3 SIZE.
305.3.1 NEW BUILDINGS AND FACILITIES
IN NEW BUILDINGS AND FACILITIES, THE CLEAR FLOOR SPACE SHALL BE 52 INCHES MINIMUM IN LENGTH AND 30 INCHES MINIMUM IN WIDTH.

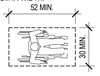


FIGURE 305.3.1 SIZE OF CLEAR FLOOR SPACE - NEW BUILDINGS

305.4 KNEE AND TOW CLEARANCE.
UNLESS OTHERWISE SPECIFIED, CLEAR FLOOR SPACE HALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 306.

305.5 POSITION.
UNLESS OTHERWISE SPECIFIED, CLEAR FLOOR SPACES SHALL BE POSITIONED FOR EITHER FORWARD OR PARALLEL APPROACH TO AN ELEMENT.

FIGURE 305.5 (A) POSITION OF CLEAR FLOOR SPACE - FORWARD

FIGURE 305.5 (B) POSITION OF CLEAR FLOORS SPACE - PARALLEL

305.6 APPROACH.
ONE FULL UNOBSTRUCTED SIDE OF A CLEAR FLOOR SPACE SHALL ADJOIN OR OVERLAP AN ACCESSIBLE ROUTE OR ADJOIN ANOTHER CLEAR FLOOR SPACE.

305.7 ALCOVES.
IF A CLEAR FLOOR SPACE IS IN AN ALCOVE OR OTHERWISE CONFINED ON ALL OR PART OF THREE SIDES, ADDITIONAL MANEUVERING CLEARANCES COMPLYING WITH SECTIONS 305.7.1 AND 305.7.2 SHALL BE PROVIDED, AS APPLICABLE.

305.7 PARALLEL APPROACH.
WHERE A CLEAR FLOOR SPACE IS POSITIONED FOR A PARALLEL APPROACH, THE ALCOVE SHALL BE 60 INCHES MINIMUM IN WIDTH WHERE THE DEPTH EXCEEDS 15 INCHES.

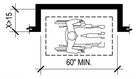


FIGURE 305.7.1 MANEUVERING CLEARANCE IN AN ALCOVE PARALLEL APPROACH

305.7.2 FORWARD APPROACH.
WHERE A CLEAR FLOOR SPACE IS POSITIONED FOR A FORWARD APPROACH, THE ALCOVE SHALL BE 36 INCHES MINIMUM IN WIDTH WHERE THE DEPTH EXCEEDS 24 INCHES.

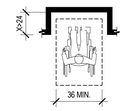


FIGURE 305.7.2 MANEUVERING CLEARANCE IN AN ALCOVE FORWARD APPROACH

CHAPTER 3 BUILDING BLOCKS: 306 KNEE AND TOE CLEARANCE

306.1 GENERAL.
WHERE SPACE BENEATH AN ELEMENT IS INCLUIDED AS PART OF THE CLEAR SPACE AT AN ELEMENT , CLEARANCE AT AN ELEMENT, OR A TURNING SPACE, THE SPACE SHALL COMPLY WITH SECTION 306. ADDITIONAL SPACE SHALL NOT BE PROHIBITED BENEATH AN ELEMENT, BUT SHALL NOT BE CONSIDERED AS PART OF THE CLEAR FLOOR SPACE OR TURNING SPACE.

306.2 TOE CLEARANCE.

306.2.1 GENERAL.
SPACE BENEATH AN ELEMENT BETWEEN THE FLOOR AND 9 INCHES ABOVE THE FLOOR SHALL BE CONSIDERED TOE CLEARANCE AND SHALL COMPLY WITH SECTION 306.2.

306.2.2 MAXIMUM DEPTH
TOE CLEARANCE SHALL BE PERMITTED TO EXTEND 25 INCHES MAXIMUM UNDER AN ELEMENT

306.2.3 MINIMUM DEPTH
WHERE TOE CLEARANCE IS REQUIRED AT AN ELEMENT AS PART OF A CLEAR FLOOR SPACE COMPLYING WITH SECTION 305, THE TOE CLEARANCE SHALL EXTEND 17 INCHES MINIMUM BENEATH THE ELEMENT.

306.2.4 ADDITIONAL CLEARANCE
SPACE EXTENDING GREATER THAN 6 INCHES BEYOND THE AVAILABLE KNEE CLEARANCE AT 9 INCHES ABOVE THE FLOOR SHALL NOT BE CONSIDERED TOE CLEARANCE.

306.2.5 WIDTH
TOE CLEARANCE SHALL BE 30 INCHES MINIMUM IN WIDTH.

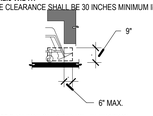


FIGURE 306.2 (A) TOE CLEARANCE - ELEVATION

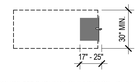


FIGURE 306.2 (B) TOE CLEARANCE - PLAN

306.3 KNEE CLEARANCE.
306.3.1 GENERAL
SPACE BENEATH AN ELEMENT BETWEEN 9 INCHES AND 27 INCHES ABOVE THE FLOOR SHALL BE CONSIDERED KNEE CLEARANCE AND SHALL COMPLY WITH SECTION 306.3.

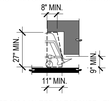


FIGURE 306.3 (A) TOE CLEARANCE - ELEVATION

306.3.2 MAXIMUM DEPTH
KNEE CLEARANCE SHALL BE PERMITTED TO EXTEND 25 INCHES MAXIMUM UNDER AN ELEMENT AT 9 INCHES ABOVE THE FLOOR.

306.3.3 MINIMUM DEPTH
WHERE KNEE CLEARANCES IS REQUIRED BENEATH AN ELEMENT AS PART OF A CLEAR FLOOR SPACE COMPLYING WITH SECTION 305, THE KNEE CLEARANCE SHALL BE 11 INCHES MINIMUM IN DEPTH AT 9 INCHES ABOVE THE FLOOR, AND 8 INCHES MINIMUM IN DEPTH AT 27 INCHES ABOVE THE FLOOR.

306.3.4 CLEARANCE REDUCTION
BETWEEN 9 INCHES AND 27 INCHES ABOVE THE FLOOR, THE KNEE CLEARANCE SHALL BE PERMITTED TO BE REDUCES AT A RATE OF 1 INCH IN DEPTH FOR EACH 6 INCHES IN HEIGHT.

306.3.5 WIDTH
KNEE CLEARANCE SHALL BE 30 INCHES MINIMUM IN WIDTH.

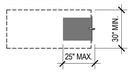
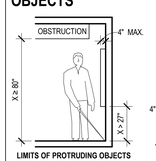


FIGURE 306.2 (B) TOE CLEARANCE - PLAN

CHAPTER 3 BUILDING BLOCKS: 307 PROTRUDING OBJECTS



LIMITS OF PROTRUDING OBJECTS

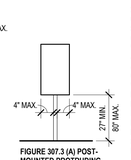


FIGURE 307.3 (A) POST-MOUNTED PROTRUDING OBJECT

307.3 POST-MOUNTED OBJECTS.
OBJECTS ON POSTS OR PYLONS SHALL BE PERMITTED TO OVERHANG 4 INCHES MAXIMUM WHERE MORE THAN 27 INCHES AND NOT MORE THAN 80 INCHES ABOVE THE FLOOR. OBJECTS ON MULTIPLE POSTS OR PYLONS WHERE THE CLEAR DISTANCE BETWEEN THE POSTS OR PYLONS IS GREATER THAN 12 INCHES SHALL HAVE THE LOWEST EDGE OF SUCH OBJECT EITHER 27 INCHES MAXIMUM OR 80 INCHES MIN ABOVE THE FLOOR.

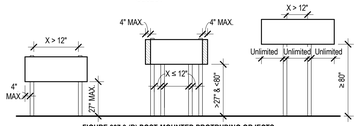


FIGURE 307.3 (B) POST-MOUNTED PROTRUDING OBJECTS

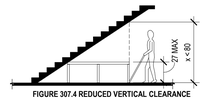
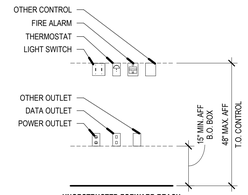


FIGURE 307.4 REDUCED VERTICAL CLEARANCE

CHAPTER 3 BUILDING BLOCKS: 308 REACH RANGES



UNOBSTRUCTED FORWARD REACH

308.1 GENERAL.
REACH RANGES SHALL COMPLY WITH SECTION 308.

308.2 FORWARD REACH
308.2.1 UNOBSTRUCTED
WHERE A FORWARD REACH IN UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48 INCHES MAXIMUM AND THE LOW FORWARD REACH SHALL BE 15 INCHES MINIMUM ABOVE THE FLOOR.

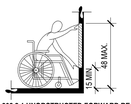


FIGURE 308.2.1 UNOBSTRUCTED FORWARD REACH

308.2.2 OBSTRUCTED HIGH REACH
WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR FLOOR SPACE COMPLYING WITH SECTION 305 AND KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 306 SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION. THE FORWARD REACH SHALL BE 48 INCHES MAXIMUM ABOVE THE FLOOR WHERE THE REACH DEPTH OVER THE OBSTRUCTION IS 20 INCHES MAXIMUM. THE HIGH FORWARD REACH SHALL BE 44 INCHES MAXIMUM ABOVE THE FLOOR WHERE THE REACH DEPTH OVER THE OBSTRUCTION IS GREATER THAN 20 INCHES AND NOT MORE THAN 25 INCHES MAXIMUM.

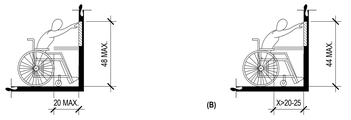


FIGURE 308.2.2 OBSTRUCTED HIGH FORWARD REACH

308.3 SIDE REACH
308.3.1 UNOBSTRUCTED
WHERE A CLEAR FLOOR SPACE COMPLYING WITH SECTION 305 ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE EDGE OF THE CLEAR FLOOR SPACE IS 10 INCHES MAXIMUM FROM THE ELEMENT, THE HIGH SIDE REACH SHALL BE 48 INCHES MAXIMUM AND THE LOW SIDE REACH SHALL BE 15 INCHES MINIMUM ABOVE THE FLOOR.

EXCEPTIONS:
1. EXISTING ELEMENTS THAT ARE NOT ALTERED SHALL BE PERMITTED AT 54 INCHES MAXIMUM ABOVE THE FLOOR.
2. OPERABLE PARTS ON FUEL DISPENSERS INSTALLED ON EXISTING CURBS SHALL BE PERMITTED AT 54 INCHES MAXIMUM ABOVE THE FLOOR.

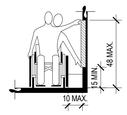


FIGURE 308.3.1 UNOBSTRUCTED SIDE REACH

308.3.2 OBSTRUCTED HIGH REACH
WHERE A CLEAR FLOOR SPACE COMPLYING WITH SECTION 305 ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES MAXIMUM ABOVE THE FLOOR AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES MAXIMUM. THE HIGH SIDE REACH SHALL BE 48 INCHES MAXIMUM ABOVE THE FLOOR FOR A REACH DEPTH OF 10 INCHES MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 10 INCHES, THE HIGH SIDE REACH SHALL BE 46 INCHES MAXIMUM ABOVE THE FLOOR FOR A REACH DEPTH OF 24 INCHES MAXIMUM.

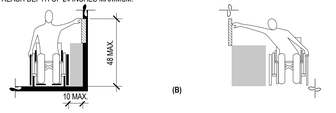


FIGURE 308.3.2 OBSTRUCTED HIGH SIDE REACH

CHAPTER 4 ACCESSIBLE ROUTES: 403 WALKING SURFACES

403.5.1 GENERAL.
THE CLEAR WIDTH OF AN INTERIOR ACCESSIBLE ROUTE SHALL BE 36 INCHES MINIMUM. THE CLEAR WIDTH OF AN EXTERIOR ACCESSIBLE ROUTE SHALL BE 48 INCHES MINIMUM.

EXCEPTIONS:
1. IN NEW BUILDINGS AND FACILITIES, THE CLEAR WIDTH SHALL BE PERMITTED TO BE REDUCES TO 32 INCHES MINIMUM FOR A LENGTH OF 24 INCHES MAXIMUM PROVIDED THE REDUCED -WIDTH SEGMENTS BY SEGMENTS THAT ARE 52 INCHES MINIMUM IN LENGTH AND 36 INCHES MINIMUM IN WIDTH.
2. IN EXISTING BUILDINGS AND FACILITIES, THE CLEAR WIDTH SHALL BE PERMITTED TO BE REDUCED TO 32 INCHES MINIMUM FOR A LENGTH OF 24 INCHES MAXIMUM PROVIDED THE REDUCES WIDTH SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 48 INCHES MINIMUM IN LENGTH AND 36 INCHES MINIMUM IN WIDTH.
3. THE CLEAR WIDTH OF AN EXTERIOR ACCESSIBLE ROUTE LOCATED WITHIN SEATING AREAS SHALL BE 36 INCHES MINIMUM.
4. THE CLEAR WIDTH OF AN EXTERIOR RAMP SHALL COMPLY WITH SECTION 405.5.

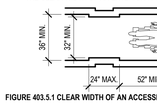


FIGURE 403.5.1 CLEAR WIDTH OF AN ACCESSIBLE ROUTE -NEW BUILDINGS - INTERIOR

1. ADD 6 INCHES IF CLOSER AND LATCH PROVIDED.
2. ADD 6 INCHES IF CLOSER PROVIDED.
3. ADD 12 INCHES BEYOND LATCH IF CLOSER AND LATCH PROVIDED.
4. BEYOND HINGE SIDE.

403.5.1 GENERAL.
THE CLEAR WIDTH OF AN INTERIOR ACCESSIBLE ROUTE SHALL BE 36 INCHES MINIMUM. THE CLEAR WIDTH OF AN EXTERIOR ACCESSIBLE ROUTE SHALL BE 48 INCHES MINIMUM.

EXCEPTIONS:
1. IN NEW BUILDINGS AND FACILITIES, THE CLEAR WIDTH SHALL BE PERMITTED TO BE REDUCES TO 32 INCHES MINIMUM FOR A LENGTH OF 24 INCHES MAXIMUM PROVIDED THE REDUCED -WIDTH SEGMENTS BY SEGMENTS THAT ARE 52 INCHES MINIMUM IN LENGTH AND 36 INCHES MINIMUM IN WIDTH.
2. IN EXISTING BUILDINGS AND FACILITIES, THE CLEAR WIDTH SHALL BE PERMITTED TO BE REDUCED TO 32 INCHES MINIMUM FOR A LENGTH OF 24 INCHES MAXIMUM PROVIDED THE REDUCES WIDTH SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 48 INCHES MINIMUM IN LENGTH AND 36 INCHES MINIMUM IN WIDTH.
3. THE CLEAR WIDTH OF AN EXTERIOR ACCESSIBLE ROUTE LOCATED WITHIN SEATING AREAS SHALL BE 36 INCHES MINIMUM.
4. THE CLEAR WIDTH OF AN EXTERIOR RAMP SHALL COMPLY WITH SECTION 405.5.

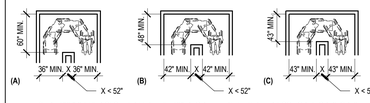


FIGURE 403.5.2.1 (A,B,C) CLEAR WIDTH AT 180-DEGREE TURN NEW BUILDINGS - OPT1, OPT2, OPT3.

403.5.3.1 NEW BUILDINGS AND FACILITIES.
IN NEW BUILDINGS AND FACILITIES, WHERE AN ACCESSIBLE ROUTE MAKES A 90-DEGREE TURN THE CLEAR WIDTHS APPROACHING THE TURN AND LEAVING THE TURN SHALL BE ONE OF THE FOLLOWING SETS OF DIMENSIONS:

1. BOTH LEGS OF THE TURN SHALL BE 40 INCHES MINIMUM IN WIDTH OF EACH LEG OF THE TURN SHALL BE MAINTAINED FOR 28 INCHES MINIMUM FROM THE INNER CORNER.
2. WHERE THE INTERIOR CORNERS OF THE TURN ARE CHAMFERED FOR 8 INCHES MINIMUM ALONG BOTH WALLS, BOTH LEGS OF THE TURN SHALL BE 36 INCHES MINIMUM IN WIDTH.
3. WHERE ONE LEG OF THE TURN IS 42 INCHES MINIMUM IN WIDTH, THE OTHER SHALL BE PERMITTED TO BE 38 INCHES MINIMUM IN WIDTH.
4. WHERE ONE LEG OF THE TURN IS 44 INCHES MINIMUM IN WIDTH, THE OTHER SHALL BE PERMITTED TO BE 36 INCHES MINIMUM IN WIDTH.

EXCEPTIONS:
1. WHERE AN ACCESSIBLE ROUTE MAKES A 90-DEGREE TURN AT DOORS, DOORWAYS AND GATES COMPLYING WITH SECTION 404.2.3, THE ROUTE SHALL NOT BE REQUIRED TO COMPLY WITH THIS SECTION.
2. WHERE AN ACCESSIBLE ROUTE MAKES A 90-DEGREE TURN AT AN ELEVATOR OR PLATFORM LIFT COMPLYING WITH SECTIONS 407 THROUGH 410, THE ACCESSIBLE ROUTE SHALL NOT BE REQUIRED TO COMPLY WITH THIS SECTION.

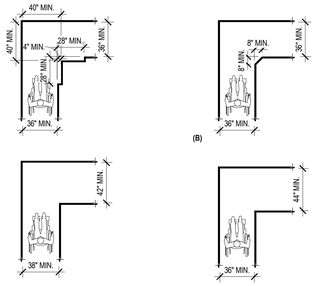


FIGURE 403.5.3.1 (A,B,C,D) CLEAR WIDTH AT 90-DEGREE TURN NEW BUILDINGS - OPT1, OPT2, OPT3, OPT4.

CHAPTER 4 ACCESSIBLE ROUTES: 404 DOORS AND DOORWAYS

404.2 MANUAL DOORS, DOORWAYS AND MANUAL GATES
404.2.2 CLEAR WIDTH
DOORWAYS SHALL HAVE A CLEAR OPENING WIDTH OF 32 INCHES MINIMUM CLEAR OPENING WIDTH OF DOORWAY WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF DOOR AND STOP, WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24 INCHES IN DEPTH AT DOORS AND DOORWAYS WITHOUT DOORS SHALL PROVIDE A CLEAR OPENING WIDTH OF 36 INCHES MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE CLEAR OPENING WIDTH LOWER THAN 34 INCHES ABOVE THE FLOOR. PROJECTIONS INTO THE CLEAR OPENING WIDTH BETWEEN 34 INCHES AND 80 INCHES ABOVE THE FLOOR SHALL NOT EXCEED 4 INCHES.

EXCEPTIONS:
1. DOOR CLOSERS AND DOOR STOPS SHALL BE PERMITTED TO BE 78 INCHES MINIMUM ABOVE THE FLOOR.
2. IN ALTERATIONS, A PROJECTION OF 5/8 INCH MAXIMUM INTO THE REQUIRED CLEAR OPENING WIDTH SHALL BE PERMITTED FOR THE SIDE STOP.

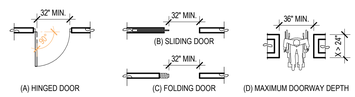


FIGURE 404.2.2 (A,B,C,D) CLEAR WIDTH OF DOORWAYS

404.2.3 MANEUVERING CLEARANCES
MINIMUM MANEUVERING CLEARANCES AT DOORS AND GATES COMPLY WITH SECTION 404.2.3 MANEUVERING CLEARANCES SHALL INCLUDE THE FULL CLEAR OPENING WIDTH OF THE DOORWAY AND THE REQUIRED LATCH-SIDE OR HINGE-SIDE CLEARANCE.

404.2.3.2 FLOOR SURFACE
THE FLOOR SURFACE WITHIN THE MANEUVERING CLEARANCES SHALL HAVE A SLOPE NOT STEEPER THAN 1:48 AND SHALL COMPLY WITH SECTION 302.

404.2.3.2 SWINGING DOORS AND GATES
SWINGING DOORS AND GATES SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 404.2.3.2.

CLEAR DOORWAY WIDTH AND DEPTH
* IF BOTH CLOSER AND LATCH ARE PROVIDED

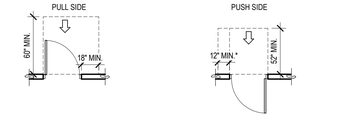


FIGURE 404.2.3.2 (A) MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS FRONT APPROACH - PULL SIDE

FIGURE 404.2.3.2 (B) MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS FRONT APPROACH - PUSH SIDE- NEW BUILDINGS

* IF X<36" MIN. THEN Y=60" MIN. * IF BOTH CLOSER AND LATCH ARE PROVIDED
IF X=42" MIN. THEN Y=54" MIN. ** 48" MIN IF DOOR HAS BOTH A CLOSER AND A LATCH

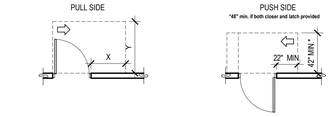


FIGURE 404.2.3.2 (E) MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS HINGE APPROACH - PULL SIDE

FIGURE 404.2.3.2 (F) MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS HINGE APPROACH - PUSH SIDE

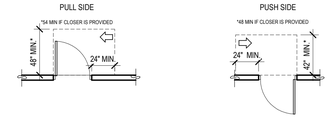


FIGURE 404.2.3.2 (G) MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS LATCH APPROACH - PULL SIDE

FIGURE 404.2.3.2 (H) MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS LATCH APPROACH - PUSH SIDE

TYPE OF USE		MINIMUM MANEUVERING CLEARANCES	
APPROACH DIRECTION	DOOR OR GATE SIDE	PERPENDICULAR TO DORWAY	PARALLEL TO DOORWAY (BEYOND LATCH UNLESS NOTED)
FROM FRONT	PULL	60 INCHES	18 INCHES
FROM FRONT	PUSH	52 INCHES	0 INCHES[3]
FROM HINGE SIDE	PULL	60 INCHES	36 INCHES
FROM HINGE SIDE	PULL	54 INCHES	42 INCHES
FROM HINGE SIDE	PUSH	42 INCHES	22 INCHES[4]
FROM LATCH SIDE	PULL	48 INCHES	24 INCHES
FROM LATCH SIDE	PUSH	42 INCHES	24 INCHES

TABLE 404.2.3.2 MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES

APPROACH DIRECTION	MINIMUM MANEUVERING CLEARANCES	
	PERPENDICULAR TO DORWAY	PARALLEL TO DOORWAY (BEYOND STOP OR LATCH SIDE UNLESS NOTED)
FROM FRONT	52 INCHES	0 INCHES
FROM FRONT	42 INCHES	22 INCHES[1]
FROM HINGE SIDE	42 INCHES	24 INCHES

TABLE 404.2.3.3 MANEUVERING CLEARANCES AT SLIDING AND FOLDING DOORS
*BEYOND POCKET OR HINGE SIDE

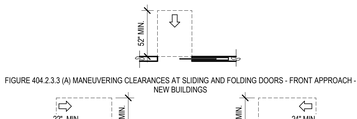


FIGURE 404.2.3.3 (A) MANEUVERING CLEARANCES AT SLIDING AND FOLDING DOORS - FRONT APPROACH - NEW BUILDINGS

FIGURE 404.2.3.3 (C) MANEUVERING CLEARANCES AT SLIDING AND FOLDING DOORS - POCKET OR HINGE APPROACH

FIGURE 404.2.3.3 (D) MANEUVERING CLEARANCES AT SLIDING AND FOLDING DOORS - STOP OR LATCH APPROACH

FIGURE 404.2.3.4 (A) MANEUVERING CLEARANCES DOORWAYS WITHOUT DOOR GATES - FRONT APPROACH - NEW BUILDINGS

FIGURE 404.2.3.4 (C) MANEUVERING CLEARANCES DOORWAYS WITHOUT DOOR GATES - SIDE APPROACH

404.2.4 THRESHOLDS
IF PROVIDED, THRESHOLDS AT DOORWAYS SHALL BE 1/2 INCH MAXIMUM IN HEIGHT. RAISED THRESHOLDS AND CHANGES IN LEVEL AT DOORWAYS SHALL COMPLY WITH SECTIONS 302 AND 303.

EXCEPTIONS: AN EXISTING OR ALTERED THRESHOLDS SHALL BE PERMITTED TO BE 3/4 INCH MAXIMUM IN HEIGHT PROVIDED THAT THE THRESHOLDS HAS A BEVELED EDGE ON EACH SIDE WITH A MAXIMUM SLOPES OF 1:2 FOR THE HEIGHT EXCEEDING 1/4 INCH.

404.2.5 TWO DOORS OR GATES IN SERIES
DISTANCE BETWEEN TWO HINGED OR PIVOTED DOORS OR GATES IN SERIES SHALL BE 48 INCHES MINIMUM PLUS THE WIDTH OF ANY DOOR OR GATE SWINGING INTO THE SPACE. THE SPACE BETWEEN THE DOOR AND GATES SHALL PROVIDE A TURNING SPACE.

NOTE: ALL DOORS IN ALCOVES SHALL COMPLY W/ THE CLEARANCES FOR FRONT APPROACHES

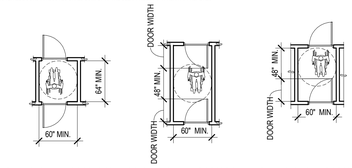
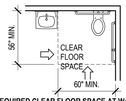


FIGURE 404.2.5(A) TWO DOORS OR GATES IN A SERIES - NEW BUILD

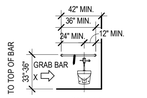
604. TOILETS AND TOILET COMPARTMENTS

*THE SPACE BETWEEN THE GRAB BARS AND SHOWER CONTROLS, SHOWER FITTINGS, AND OTHER GRAB BARS ABOVE THE GRAB BAR TO BE 1 1/2" MIN.

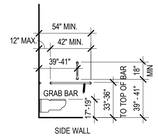
GRAB BAR



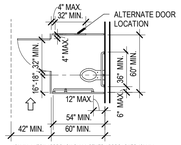
REQUIRED CLEAR FLOOR SPACE AT WATER CLOSETS



X-PROVIDE 36" LENGTH FOR SIDE TRANSFER TOILETS

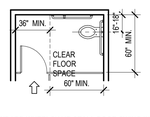


GRAB BARS AT WATER CLOSETS

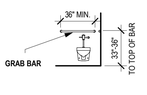


42" MIN. LATCH APPROACH ONLY, OTHER APPROACHES 48" MIN.

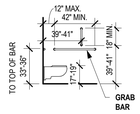
STANDARD WHEELCHAIR STALL DOOR SWING OUT



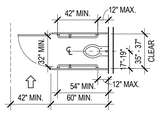
STANDARD WHEELCHAIR STALL DOOR SWING IN (END OF ROW)



REAR WALL OF STANDARD STALL

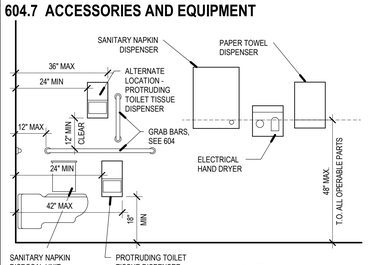


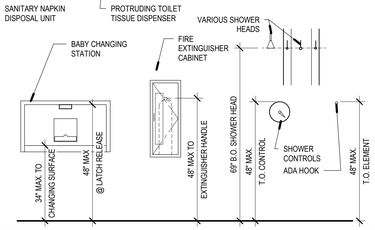
SIDE WALLS



AMBULATORY STALLS

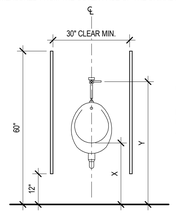
604.7 ACCESSORIES AND EQUIPMENT





605.2 URINALS

605.2 HEIGHT AND DEPTH URINALS SHALL BE OF THE STALL TYPE OR SHALL BE OF THE WALL HUNG TYPE WITH THE RIM AT 17" (430MM) MAXIMUM ABOVE THE FLOOR. URINALS SHALL BE 13 1/2" (345MM) MINIMUM IN DEPTH MEASURED FROM THE OUTER FACE OF THE URINAL RIM TO THE FINISHED WALL SURFACE.

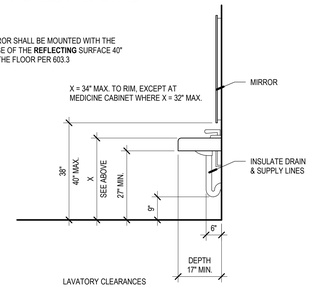


URINAL SCREENS

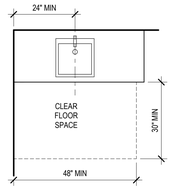
FOR CHILDREN'S URINALS, X = 16" MAX. AND Y = 44". FOR ACCESSIBLE URINALS, X = 17" MAX. AND Y = 44". ALL OTHER URINALS, X = 24" AND Y = 48" MAX.

606. LAVATORIES AND SINKS

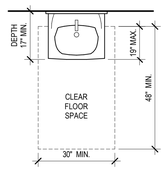
NOTE: A MIRROR SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE **REFLECTING** SURFACE 40" MAX ABOVE THE FLOOR PER 603.3



LAVATORY CLEARANCES



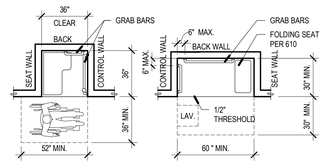
CLEAR FLOOR SPACE AT PARALLEL APPROACH



CLEAR FLOOR SPACE AT LAVATORIES

NOTE:
WHERE ENHANCED REACH RANGE IS REQ'D AT LAVATORIES, FAUCETS AND SOAP DISPENSER CONTROLS TO HAVE A REACH DEPTH OF 11" MAX. OR IF AUTOMATIC TO BE ACTIVATED WITH IN A REACH OF 11" MAX. WATER AND SOAP FLOW TO BE PROVIDED W/ A REACH DEPTH OF 11" MAX.

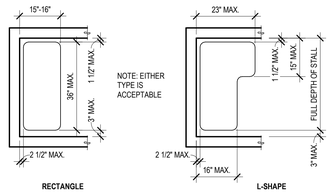
608. SHOWER COMPARTMENTS



TRANSFER-TYPE 36" X 36"

STANDARD ROLL-IN 30" X 60"

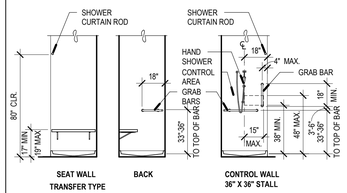
SHOWER COMPARTMENT



RECTANGLE

L-SHAPE

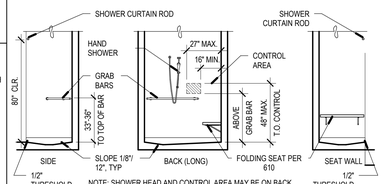
SHOWER SEAT DESIGN



SEAT WALL TRANSFER TYPE

BACK

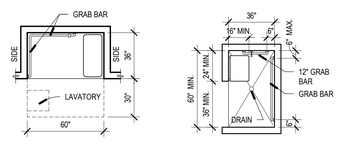
CONTROL WALL 36" X 36" STALL



GRAB BARS AT SHOWER STALLS

30" X 60" STALL

STANDARD ROLL-IN

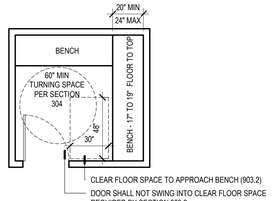


ROLL-IN W/ SEAT

ALTERNATE ROLL-IN

ROLL-IN SHOWER W/ FOLDING SEAT

612. SAUNA AND STEAM ROOMS



NOTES

1. THIS PROJECT MUST COMPLY WITH THE INFORMATION SHOWN ON THIS SHEET.
2. DIAGRAMS BASED ON 2017 ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES.
3. NUMBERED DRAWINGS REFERENCE SECTION CODES FROM 2017 ICC A 117.1

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DATE: NOVEMBER 08 2023

STATE OF UTAH — SHERI WEST — 7067869 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

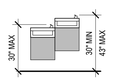
BID PACKAGE 5 - GENERAL CONSTRUCTION

TYPICAL ACCESSIBILITY STANDARDS

G302

11/8/2023 10:38:01 PM

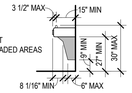
602. DRINKING FOUNTAINS FOR CHILDREN'S USE



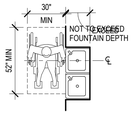
TYPICAL CHILDREN SEATED SPOUT HEIGHT

STANDING CHILD SPOUT HEIGHT

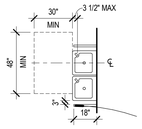
NOTE: EQUIPMENT PERMITTED IN SHADED AREAS



FRONT APPROACH SPOUT HEIGHT AND KNEE CLEARANCE



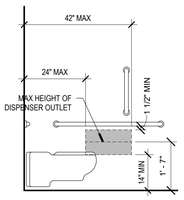
PARALLEL APPROACH BUILT-IN FOUNTAIN OR COOLER FOR CHILDREN'S USE



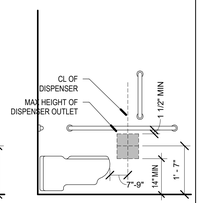
PARALLEL APPROACH FREE-STANDING FOUNTAIN OR COOLER

DRINKING FOUNTAIN 1-1/2" DIA BAR, FLOOR AND WALL MOUNTED, BOTH SIDES

603 & 604. ACCESSORIES FOR CHILDREN'S USE



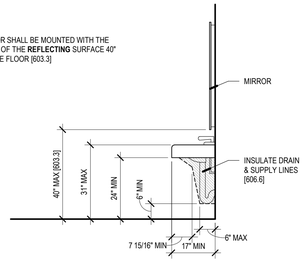
PROTRUDING DISPENSER PERMITTED AREAS [604.11.7]



PROTRUDING DISPENSER PERMITTED AREAS TWO ROLLS [604.11.7 EXCEPTION]

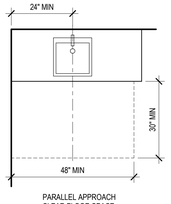
603 & 606. LAVATORIES AND SINKS FOR CHILDREN'S USE

NOTE: A MIRROR SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE **REFLECTING** SURFACE 40" MAX ABOVE THE FLOOR [603.3]

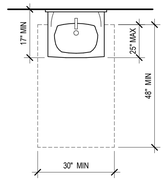


LAVATORY CLEARANCES CHILDREN AGE 6-12 AS ABOVE

LAVATORIES FOR CHILDREN AGE 5 AND UNDER MAY BE PROVIDED WITH PARALLEL APPROACH



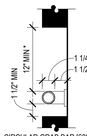
PARALLEL APPROACH CLEAR FLOOR SPACE



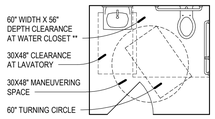
FRONT APPROACH CLEAR FLOOR SPACE

NOTE:
WHERE ENHANCED REACH RANGE IS REQ'D AT LAVATORIES, FAUCETS AND SOAP DISPENSER CONTROLS TO HAVE A REACH DEPTH OF 11" MAX OR IF AUTOMATIC TO BE ACTIVATED WITH IN A REACH OF 11" MAX. WATER AND SOAP FLOW TO BE PROVIDED W/ A REACH DEPTH OF 11" MAX

604.5, 604.9, 604.11, 609.4.2 TOILETS AND TOILET COMPARTMENTS FOR CHILDREN'S USE



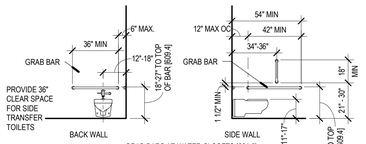
CIRCULAR GRAB BAR [609]



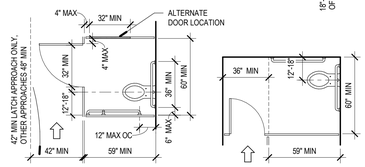
REQ'D CLEAR FLOOR SPACE AT WATER CLOSETS [603]

* THE SPACE BETWEEN THE GRAB BARS AND SHOWER CONTROLS, SHOWER FITTINGS, AND OTHER GRAB BARS ABOVE THE GRAB BAR TO BE 1 1/2" MIN

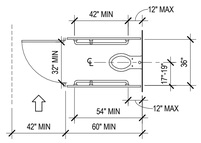
** OVERLAP ALLOWED FOR WATER CLOSET, ASSOCIATED GRAB BARS, PAPER DISPENSERS, SANITARY NAPKIN RECEPTACLES, COAT HOOKS, SHELVES, ACCESSIBLE ROUTES, CLEAR FLOOR SPACE AT OTHER FIXTURES AND TURNING SPACE. NO OTHER FIXTURES OR OBSTRUCTIONS ARE ALLOWED.



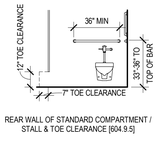
GRAB BARS AT WATER CLOSETS [604.5]



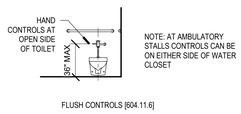
STANDARD WHEELCHAIR ACCESSIBLE COMPARTMENT / STALL [604.11]



AMBULATORY STALLS [604.10]



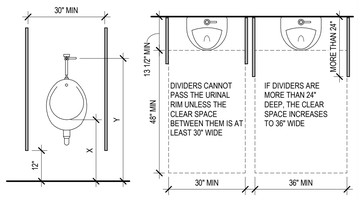
REAR WALL OF STANDARD COMPARTMENT / STALL & TOE CLEARANCE [604.9.5]



NOTE: AT AMBULATORY STALLS CONTROLS CAN BE ON EITHER SIDE OF WATER CLOSET

FLUSH CONTROLS [604.11.6]

605. URINALS



FOR CHILDREN'S URINALS, X = 16" MAX AND Y = 44".
FOR ACCESSIBLE URINALS, X = 17" MAX AND Y = 44".
ALL OTHER URINALS, X = 24" AND Y = 48" MAX.

NOTES

1. DIAGRAMS BASED ON ANSI A117.1-2017
2. NUMBERED DRAWINGS REFERENCE SECTION CODES FROM ANSI A117.7-2017
3. THESE DIAGRAMS ONLY SHOW MODIFICATIONS THAT ARE APPLICABLE TO PLUMBING FIXTURES AND ACCESSORIES FOR USE PRIMARILY BY CHILDREN; ANYTHING NOT SHOWN ON THIS SHEET SHALL BE ASSUMED TO BE COVERED ON G301 AND G302.

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DATE: NOVEMBER 08 2023

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7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

TYP. ADDITIONAL ACCESSIBILITY STANDARDS FOR BLDGS UTILIZED & OCCUPIED BY CHILDREN

G303

11/8/2023 10:38:03 PM

3D VIEW GENERAL NOTES

1. THREE DIMENSIONAL VIEWS SHOWN IN THIS SET OF DRAWINGS ARE PROVIDED TO HELP EXPLAIN THE OVERALL CONCEPT AND INTENT OF THE BUILDING DESIGN AND ARE TO BE USED FOR REFERENCE ONLY
2. BIDDERS ARE NOT TO USE THESE VIEWS TO DETERMINE COMPONENT TYPES, QUANTITIES, ASSEMBLY METHODS OR ANY OTHER INFORMATION WHICH RELATE TO CONSTRUCTION COST
3. RENDERINGS MAY ALSO BE AVAILABLE TO VIEW AS 3D PANORAMIC IMAGES BY SCANNING THE 'QR' CODE, OR BY CLICKING ON THE LINK IN THE PDF FILE. WHEN USING YOUR PHONE YOU CAN USE A GOOGLE CARDBOARD HEADSET FOR AN IMMERSIVE VIRTUAL ENVIRONMENT

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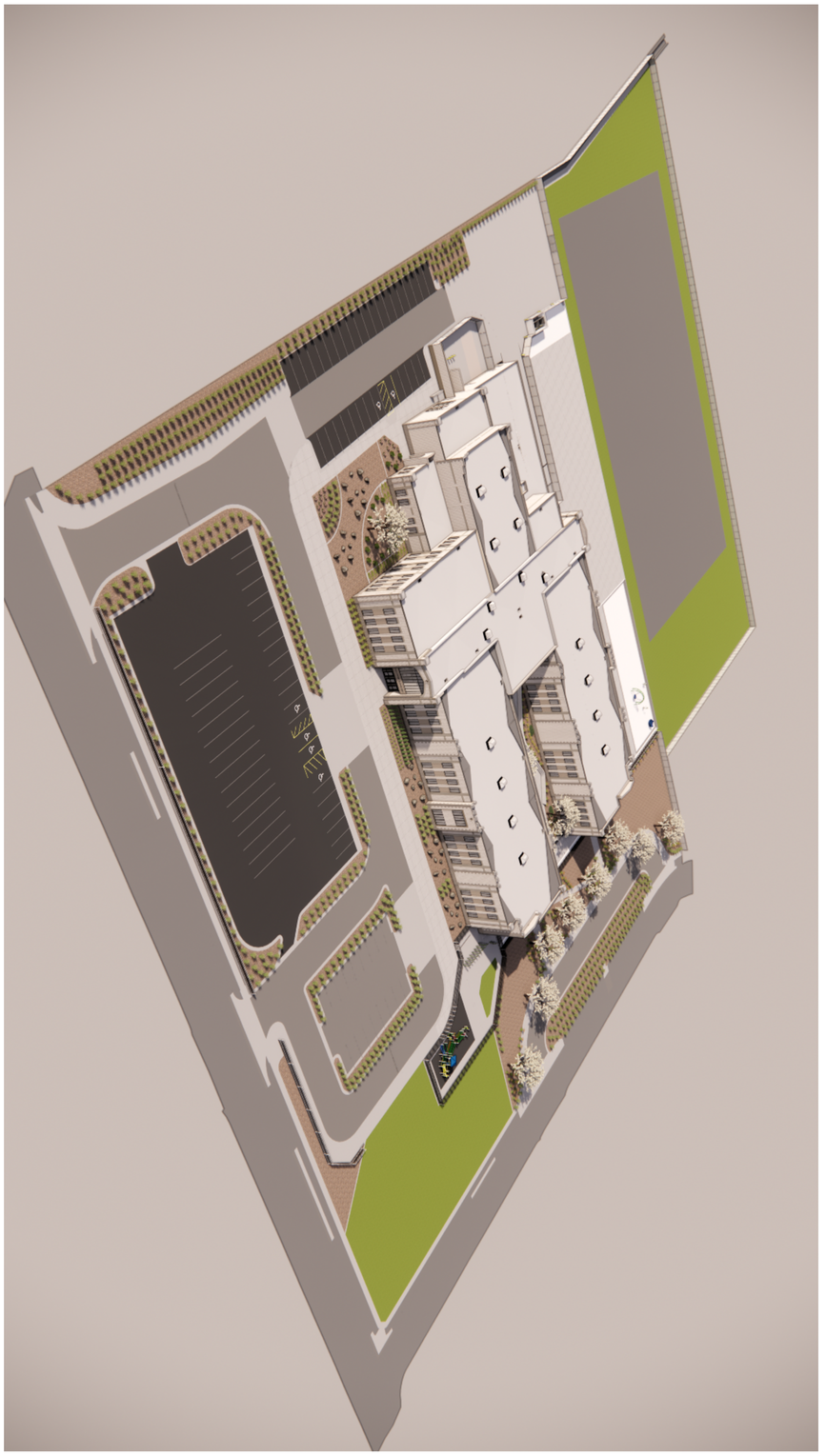
BID PACKAGE 5 - GENERAL CONSTRUCTION

FOR REFERENCE ONLY - RENDERS

G401

11/8/2023 10:38:05 PM



OSD HILLCREST ELEMENTARY REBUILD

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BID PACKAGE 5 - GENERAL CONSTRUCTION

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G402

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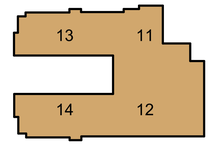
A1 OVERALL MAIN LEVEL FLOOR PLAN

SCALE: 1/16" = 1'-0"

NORTH

KEY PLAN - MAIN LEVEL



NORTH

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

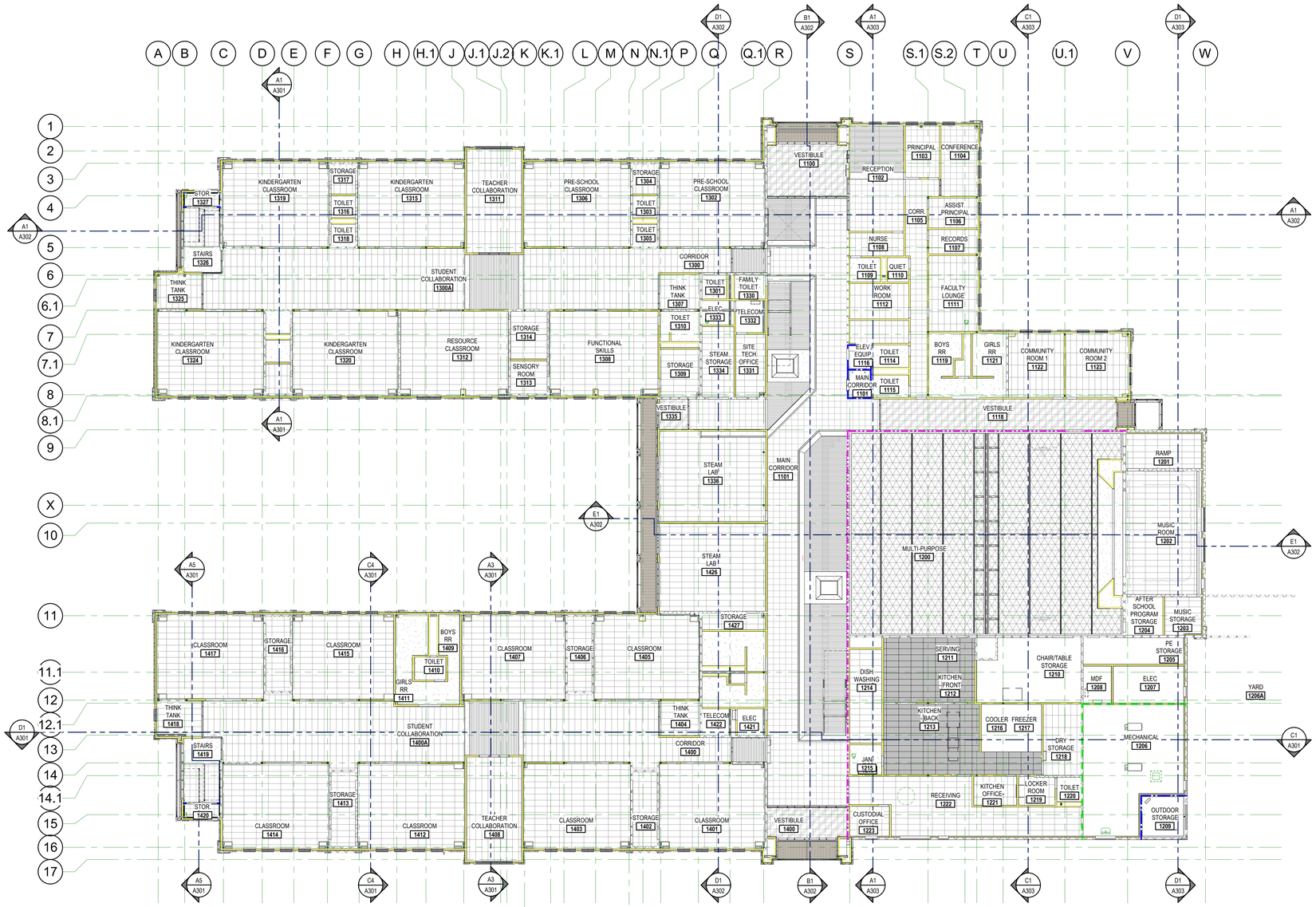
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

OVERALL MAIN LEVEL FLOOR PLAN

A010

11/8/2023 10:39:36 PM



CEILING LEGEND

A X' - X"	SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
B X' - X"	SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING
C X' - X"	SUSPENDED 5/8" GYP. BD. CEILING SYSTEM- (1 LAYER) PAINTED
D X' - X"	SUSPENDED 2' X 4' ACOUSITCAL LAY-IN TILE CEILING (VINYL COATED)
E X' - X"	OPEN TO STRUCTURE ABOVE, PAINTED.
F X' - X"	SPRAYED ON ACOUSTICAL TREATMENT ON METAL DECKING COLOR BY ARCHITECT
G X' - X"	EXTERIOR METAL SOFFIT SYSTEM WITH (2) LAYERS OF BATT INSULATION @ EXTERIOR LOCATIONS
H X' - X"	SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH 4" ALUMINUM TRIM - PAINTED BLACK ABOVE. PROVIDE R-19 BATT INSULATION ABOVE, HOLD BACK 8" FROM EDGE OF CEILING
J X' - X"	2'X2' MDF PANEL MECHANICALLY FASTENED W/ FASTENERS TO MATCH WALL PAINTED ACCENT COLOR, U.N.O. PAINT PROJECTOR COVER TRIM, SPRINKLER HEAD COVERS TO BE PAINTED TO MATCH ACCENT COLOR
K X' - X"	SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH HOLD DOWN CLIPS

CEILING PLAN SYMBOLS

ELECTRICAL

- 2'X4' LED FIXTURE
- 2'X2' LED FIXTURE
- 1'X4' LED FIXTURE
- LED STRIP FIXTURE
- RECESSED DOWN LIGHT
- WALL WASH
- TRACK LIGHTING
- EXIT SIGN, SINGLE-SIDED
- EXIT SIGN, DOUBLE-SIDED

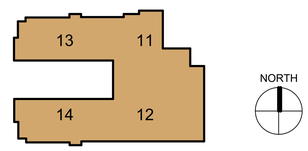
MECHANICAL

- SUPPLY GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- SPRINKLER HEAD - CEILING MOUNT
- SPRINKLER HEAD - WALL MOUNT

GENERAL CEILING NOTES

1. REFER TO DETAIL **A6/A840**, **C5/A840**, & **C6/A840** FOR TYPICAL CEILING SUSPENSION & SEISMIC BRACING
2. REFER TO DETAIL **A5/A840** & **B4/A840** FOR TYPICAL SUSPENDED GYP. BOARD CEILINGS
3. ALL UNIDENTIFIED CEILING TYPES ON THE PLANS SHALL BE TYPE " A" AT 9'-4" A.F.F.
4. GRID SUSPENSION SYSTEMS SHALL BE CENTERED WITHIN AREAS INDICATED, UNLESS NOTED OTHERWISE
5. PAINT ALL EXPOSED STRUCTURE, MECHANICAL, DUCTS, ELECTRICAL WORK, PIPING, ETC. ALL VISIBLE ELEMENTS TO BE PAINTED AT TYPE "E".
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF MECHANICAL GRILLES, DIFFUSERS, LOVERS AND LIGHT FIXTURES AND TO MECHANICAL/ELECTRICAL DRAWINGS FOR QUANTITIES AND TYPES
7. MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE WORK WITH SPRINKLER CONTRACTOR TO AVOID CONFLICTS IN FIELD
8. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
9. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED
10. FOR TYPICAL STUD HEADER SEE **B3/A840**. FOR TYPICAL MASONRY HEADER SEE **B2/A840.**
11. FOR TYPICAL CEILING PENETRATIONS SEE **A4/A840** & **C4/A840**

KEY PLAN - MAIN LEVEL



A1 OVERALL MAIN LEVEL RCP
A1/ A201 SCALE: NOT TO SCALE

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OGDEN SCHOOL DISTRICT

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OSD HILLCREST ELEMENTARY REBUILD

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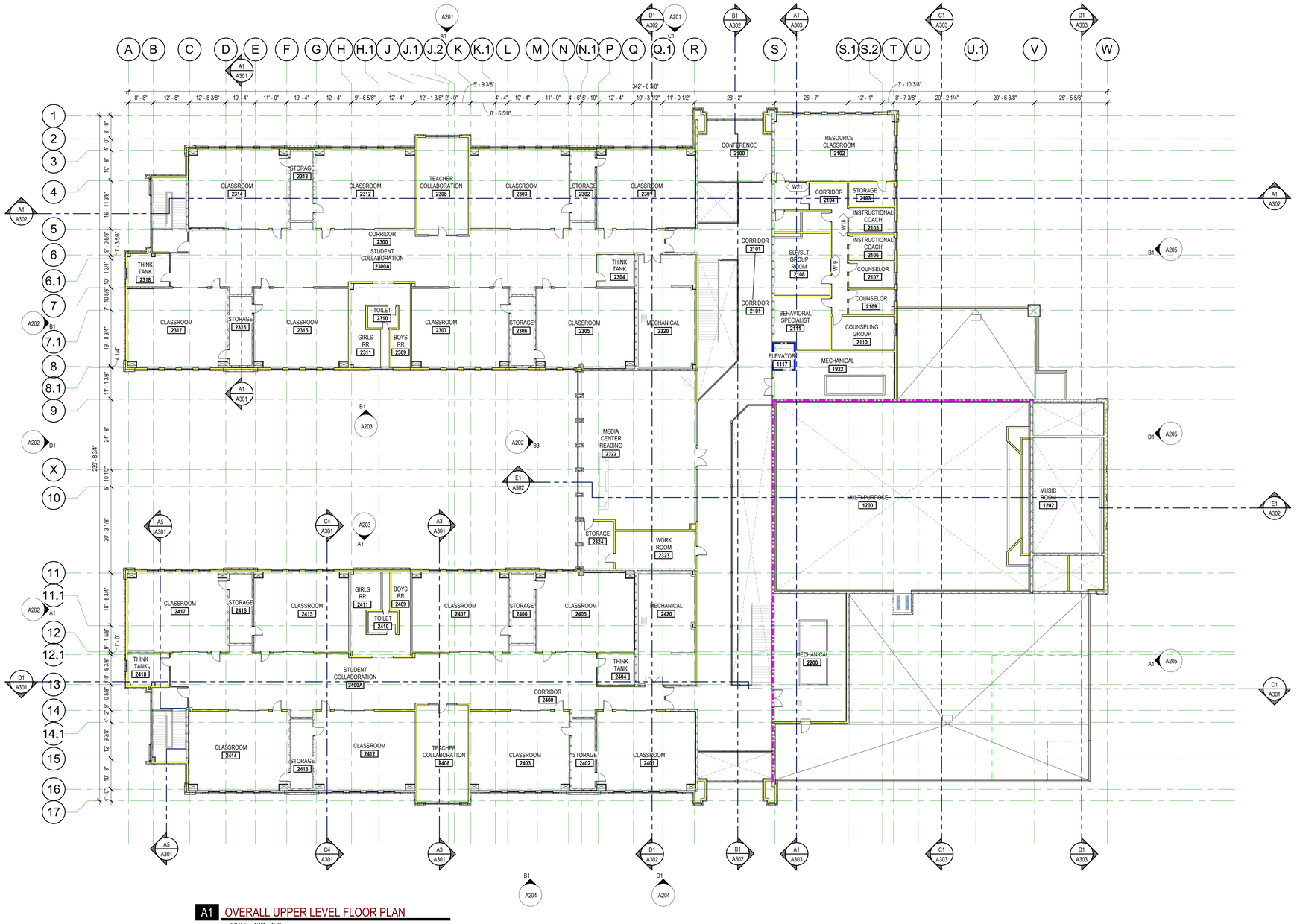
BID PACKAGE 5 - GENERAL CONSTRUCTION

OVERALL MAIN LEVEL REFLECTED CEILING PLAN

A011

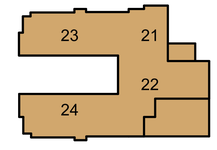
11/8/2023 10:39:43 PM



A1 OVERALL UPPER LEVEL FLOOR PLAN

SCALE: 1/16" = 1'-0"

KEY PLAN - UPPER LEVEL



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STATE OF UTAH — BRENT C. MAY — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
1	08/28/2023	BP2 - ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

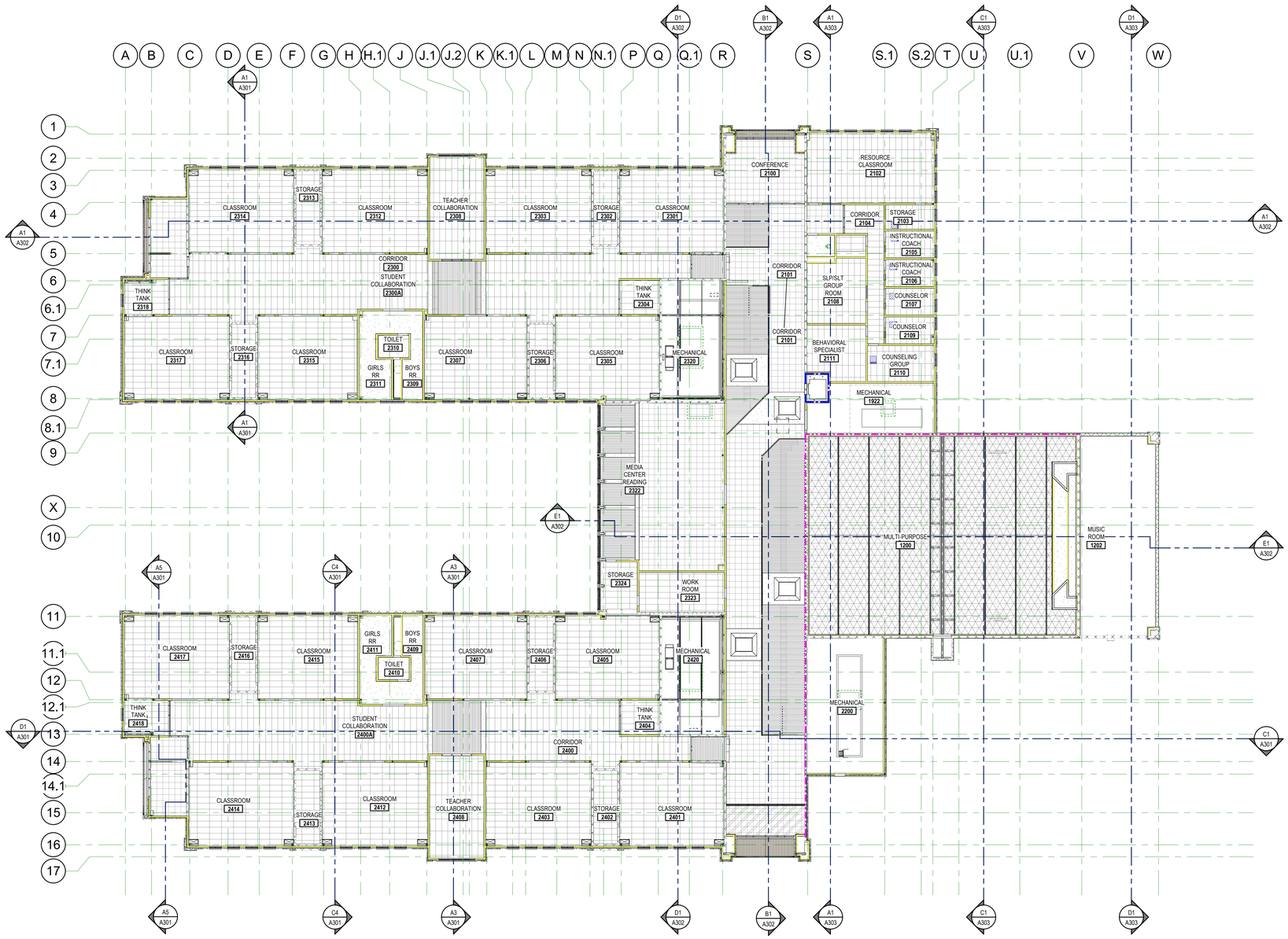
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

OVERALL UPPER LEVEL FLOOR PLAN

A020

11/8/2023 10:39:48 PM



A1 OVERALL UPPER LEVEL RCP

SCALE: 1/16" = 1'-0"

NORTH

CEILING LEGEND

A X' - X"	SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
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J X' - X"	2'X2' MDF PANEL MECHANICALLY FASTENED W/ FASTENERS TO MATCH WALL PAINTED ACCENT COLOR, U.N.O. PAINT PROJECTOR COVER TRIM, SPRINKLER HEAD COVERS TO BE PAINTED TO MATCH ACCENT COLOR
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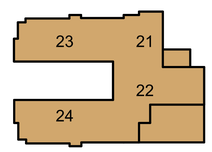
8. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
9. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED
10. FOR TYPICAL STUD HEADER SEE **B3/A840**. FOR TYPICAL MASONRY HEADER SEE **B2/A840.**
11. FOR TYPICAL CEILING PENETRATIONS SEE **A4/A840** & **C4/A840**

KEY PLAN - UPPER LEVEL



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STATE OF UTAH · SHERRIE R. · 7067969 · LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

OVERALL UPPER LEVEL REFLECTED CEILING PLAN

A021

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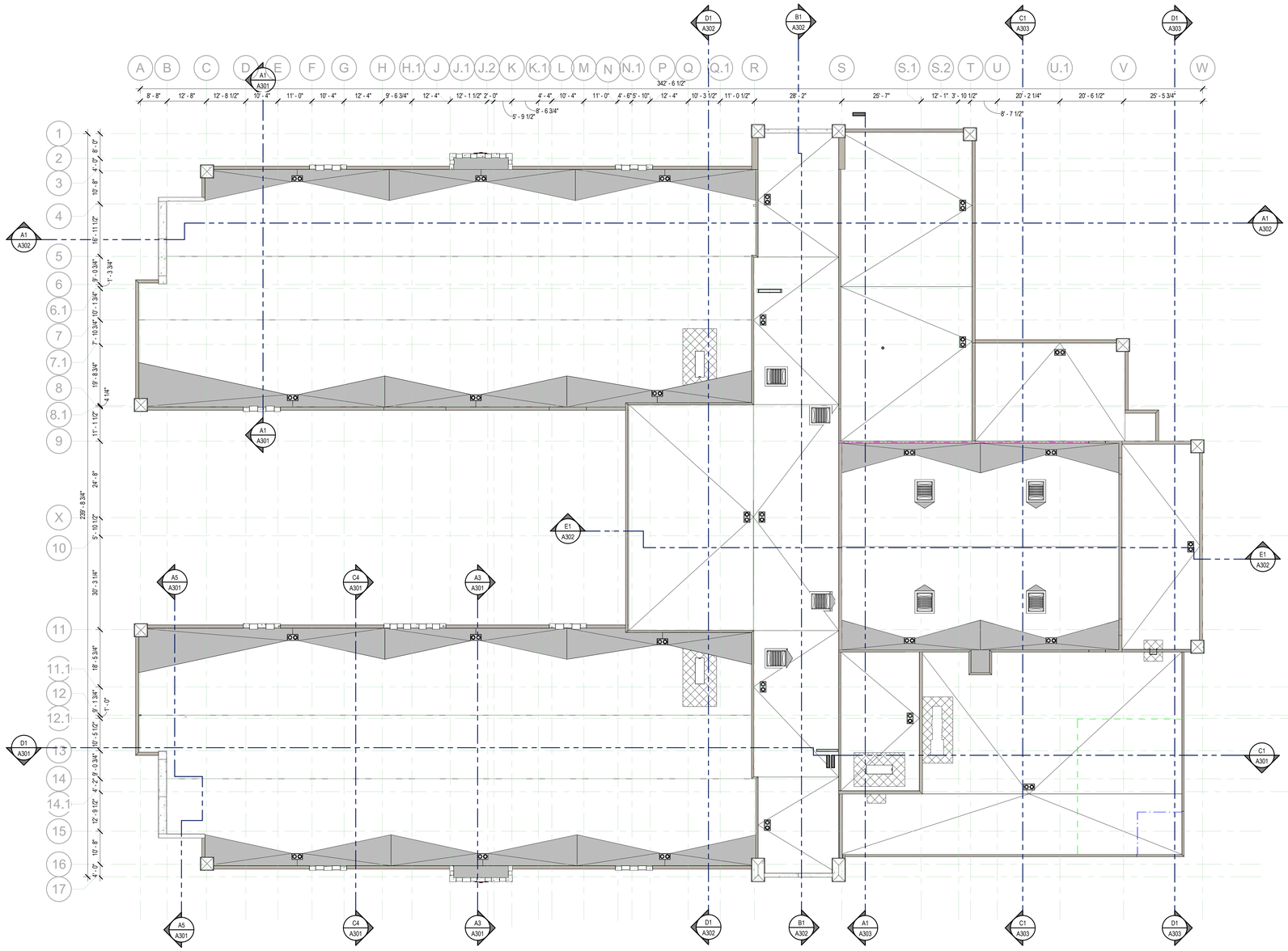


A1 PLAN - ROOF - OVERALL

SCALE: 1/16" = 1'-0"

GENERAL ROOF NOTES

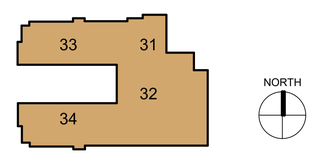
1. ALL ROOF DECK IS TO BE COVERED IN R-35 INSULATION AND SPECIFIED ROOFING SYSTEM.
2. THE CONTRACTOR IS TO ASSURE THAT THE MINIMUM ROOF SLOPE IS NOT LESS THAN 1/4" PER FOOT. ANY AREA THAT IS LESS THAN 1/4" PER FOOT SLOPE SHALL BE ADJUSTED AT THE CONTRACTORS EXPENSE WITH CRICKETING TO PROVIDE THE REQUIRED SLOPE.
3. DECK BEARING ELEVATIONS SHOWN ON THIS SHEET ARE TO BE INCLUDED FOR ARCHITECT'S REFERENCE ON ALL STEEL SHOP DRAWINGS.
4. ALL ROOFING CRICKETS ARE TO BE CONSTRUCTED OF TAPERED INSULATION. CRICKETS ARE TO BE INSTALLED SO THAT A SLOPE OF 1/4" PER FOOT IS MAINTAINED ACROSS THE FACE OF THE CRICKET.
5. PROVIDE CRICKETS AT **ALL** ROOF TOP MOUNTED EQUIPMENT (I.E. SKYLIGHTS, ROOF HATCHES, ETC.) TO ASSURE POSITIVE DRAINAGE AROUND SUCH ELEMENTS.
6. ALL FLASHING, COUNTER FLASHING AND SHEET METAL WORK TO COMPLY WITH THE MINIMUM STANDARDS PER THE CURRENT EDITION OF SMACNA.
7. NOT ALL ROOF MOUNTED EQUIPMENT AND ROOF PENETRATIONS ARE SHOWN ON THE ARCHITECTURAL ROOF PLAN SHEETS. IN ADDITION TO THE ARCHITECTURAL, THE CONTRACTOR IS RESPONSIBLE FOR REFERENCING THE STRUCTURAL, MECHANICAL AND ELECTRICAL DOCUMENTS FOR ALL SUCH OCCURRENCES. ALL PENETRATIONS OF THE ROOF SHALL MEET WITH THE ROOFING MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN INTEGRITY OF ROOFING SYSTEMS.
8. THE CONTRACTOR IS RESPONSIBLE AT BIDDING, FOR PROVIDING A MANUFACTURER'S APPROVED ROOFING DETAIL FOR ALL ROOFING CONDITIONS SO THAT THE SPECIFIED WARRANTY IS OBTAINED. IF A CONDITION SHOWN IN THESE CONSTRUCTION DOCUMENTS DOES NOT MEET THE REQUIREMENTS OF THE ROOFING MANUFACTURER THESE CONDITIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING AND INSTALLATION OF THE APPROVED DETAIL.
9. THE CONTRACTOR IS TO CONFIRM THE ROOFING SYSTEM THICKNESS, INCLUDING THE RIGID INSULATION PRIOR TO INSTALLING CURB AND PARAPET BLOCKING. BLOCKING AND CURB HEIGHTS ARE TO BE ADJUSTED AS NEEDED TO CONFORM TO THE ROOFING THICKNESS TO MEET REQUIREMENTS FOR WARRANTY.
10. WHERE ROOFING MEMBRANE IS SHOWN EXTENDING UP TO THE TOP OF THE PARAPET, THE MEMBRANE IS TO WRAP UP, OVER AND DOWN THE WOOD BLOCKING. THE AIR INFILTRATION BARRIER IS TO EXTEND UP EXTERIOR FACE OF WALL AND FULLY OVER THE TOP OF THE PARAPET WALL AND UNDER THE SILL BLOCK FLASHING. VERIFY WALL TYPE FOR PARAPET CAP WIDTH, SEE DETAILS ON SHEET **A520**. CONTRACTOR TO SEQUENCE WORK TO MEET THIS REQUIREMENT.
11. ALL TOPS OF PARAPETS TO BE PROVIDED WITH 1/2" PER FOOT MINIMUM POSITIVE SLOPE TOWARD THE ROOF FOR ADEQUATE DRAINAGE.
12. ALL PRE-MANUFACTURED MECHANICAL CURBS ARE TO BE MANUFACTURED TO ACCOMMODATE ROOF SLOPE. THEY MUST BE OF ADEQUATE HEIGHT TO ALLOW FOR THE DEPTH OF THE ROOF INSULATION, INCLUDING CRICKETS AND HAVE 8" HEIGHT ABOVE THE ROOF MEMBRANE, SEE DETAIL **XX/AXXX**.
13. SKYLIGHTS ARE TO BE INSTALLED SO THE TOP OF SKYLIGHT SLOPES 1/2" PER FOOT MINIMUM. THIS SLOPE IS TO SLOPE IN THE DIRECTION OF THE ROOF BELOW. FOR TYPICAL SKYLIGHT CURB, SEE DETAIL **XX/AXXX**.
14. ALL REGLETS ARE TO BE PREFINISHED AND ARE TO BE HELD AS LOW TO THE ROOF AS POSSIBLE, BUT HAVE 8" HEIGHT ABOVE THE ROOF MEMBRANE SO THE VISIBILITY OF THE MEMBRANE FROM THE GROUND BELOW IS MINIMIZED. AT CERTAIN LOCATIONS A SHEET METAL COVER SHEET HAS BEEN DETAILED TO COVER THIS EXPOSED VERTICAL MEMBRANE. **ALL REGLETS AT MASONRY WALLS ARE TO BE EMBEDDED INTO MORTAR JOINTS.** FOR TYPICAL EMBEDDED MASONRY REGLET, SEE DETAIL **XX/AXXX**. FOR TYPICAL SURFACE MOUNTED FLASHING ON A STUD WALL, SEE DETAIL **XX/AXXX**.
15. ROOF DRAINS ARE TO BE INSTALLED IN A TWO LEVEL DRAIN BASIN. THE BASIN IS TO BE CONSTRUCTED USING LAYERS OF ROOFING INSULATION. SEE DETAILS E4, E5 AND E6/A520.
16. FOR TYPICAL ROOF HATCH AND LADDER, SEE DETAILS **XX**, **XX**, AND **XX/AXXX**.
17. FOR TYPICAL ROOF PIPE PENETRATIONS, SEE DETAIL **XX/AXXX**.
18. FOR TYPICAL ROOF SCUPPERS SEE DETAILS **XX** AND **XX/AXXX**.

ROOF LEGEND

- SINGLE PLY ROOFING MEMBRANE
- TAPERED INSULATION CRICKET MINIMUM SLOPES: 1/8" ALONG VALLEY, 1/4" ACROSS CRICKET
- PROTECTIVE WALKABLE SURFACE
- DECK RIDGE OR VALLEY
- IMAGINARY VALLEY WITH WARPED DECKING
- AREAS HATCHED AS SUCH SHALL NOT HAVE ANY PENETRATIONS THRU THE ROOF IN ORDER TO MAINTAIN THE 2 HOUR FIRE WALL ASSEMBLY LOCATED BELOW THE DECK (AS PER 2015 IBC SECTION 706.6).
- PRIMARY AND SECONDARY ROOF DRAINS
- PRE-FABRICATED FIXED SKYLIGHT
  TYPICAL SIZE: 60x72
  DIMENSIONED TO THE CENTERS

KEYED NOTES

KEY PLAN - ROOF



NOTE: ORANGE HATCH COLOR INDICATES AREA NOT SHOWN ON SHEET.

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STATE OF UTAH
JEFFREY S. [illegible]
7067989
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

OVERALL ROOF PLAN

A030

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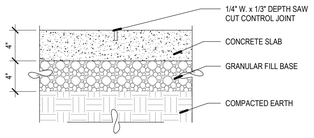
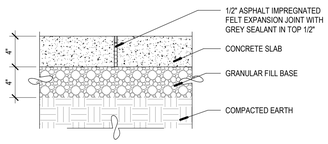


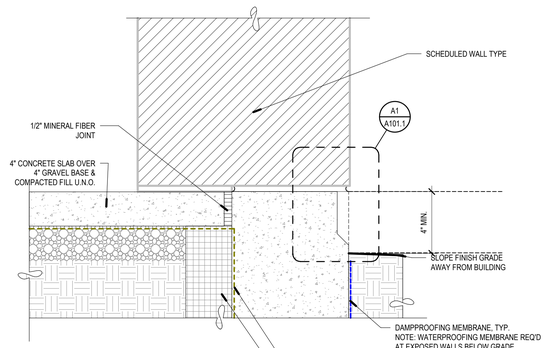
CONTROL JOINT DETAIL



EXPANSION JOINT DETAIL

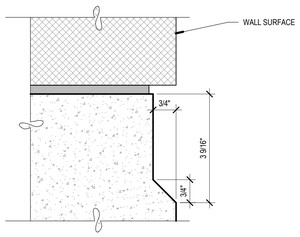
C1 TYP. CONCRETE JOINT DETAIL @ NON - EXPOSED AREAS

SCALE: 1 1/2" = 1'-0"



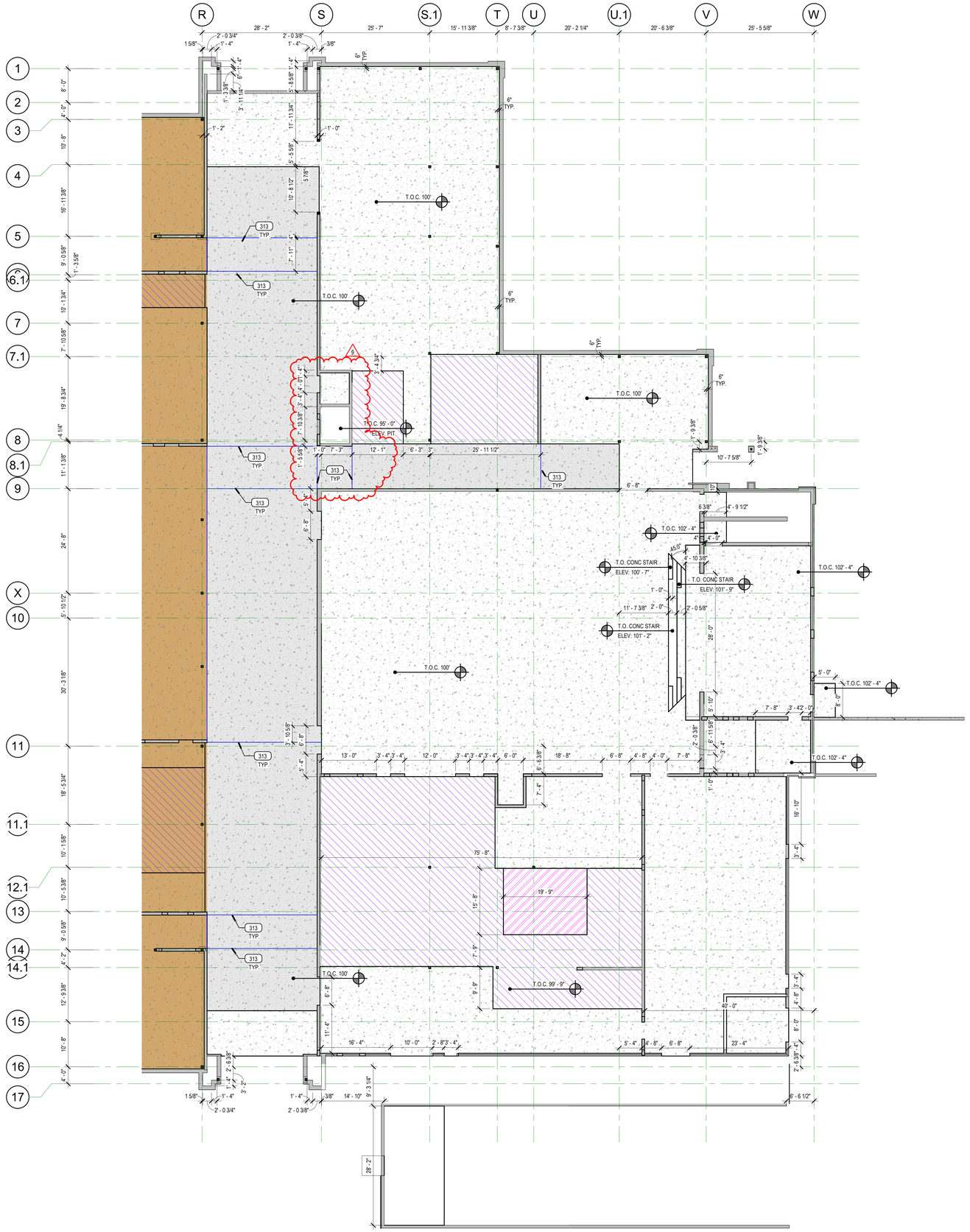
B1 FOUNDATION DETAIL TYP.

SCALE: 3" = 1'-0"



A1 FOUNDATION - REVEAL

SCALE: 6" = 1'-0"



A2 PLAN - LEVEL 01 - SLAB EDGE - AREA'S 11 & 12

SCALE: 3/32" = 1'-0"

SLAB EDGE PLAN NOTES

1. CONTROL JOINTS SHALL BE SAW CUT AND PLACED AT CENTERLINE OF COLUMNS OR EDGE OF MASONRY/CONCRETE WALLS, SPACING PER SPECIFICATIONS UNLESS NOTED OTHERWISE ON SLAB PLANS.
2. RECESSED SLABS @ KITCHEN AND RESTROOMS ARE TO BE INSIDE FACE OF STUD (INSIDE FACE OF STUD IF AT EXTERIOR WALL, INSIDE FACE OF STUD OF ROOM IF INTERIOR).

SLAB TYPE LEGEND

2" RECESSED SLAB - 2" RECESS @ KITCHEN, 2" RECESS @ RESTROOMS

10" RECESSED SLAB - 10" RECESS @ WALK-IN FREEZER/COOLER

4" SLAB ON GRADE - 4" CONCRETE SLAB ON GRADE. SEE STRUCT. DWGS.

HIGH POLISH DENSIFIED CONCRETE - 4" DENSIFIED, POLISHED CONCRETE SLAB OVER 2" CONSTRUCTION SLAB ON GRADE. SEE STRUCT DWGS.

LINE TYPE LEGEND

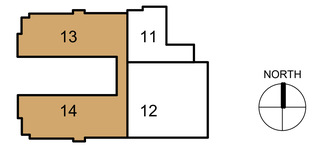
FOUNDATION WALL - INDICATES FOUNDATION WALL, AND WHERE CONCRETE WALLS DISSECT SLAB. SEE DETAIL B1/A101.1

SAWCUT JOINT - CONTROL JOINT, SAW CUT, FILL JOINTS WITH EPOXY PRIOR TO GRINDING, SEE DETAIL C1/A101.1

KEYED NOTES

313 CONTROL JOINT, SAW CUT, FILL JOINTS WITH EPOXY PRIOR TO GRINDING, SEE DETAIL C1/A101.1

KEY PLAN - MAIN LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
1	08/28/2023	BP2 - ADDENDUM 01
2	10/06/2023	BP3-ASI-01
4	10/19/2023	ASI-02
6	2023-08-09	RFI 01
9	00/00/2023	ASI-04

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SLAB EDGE PLAN - LEVEL 01 - AREA'S 11 & 12

A101.1

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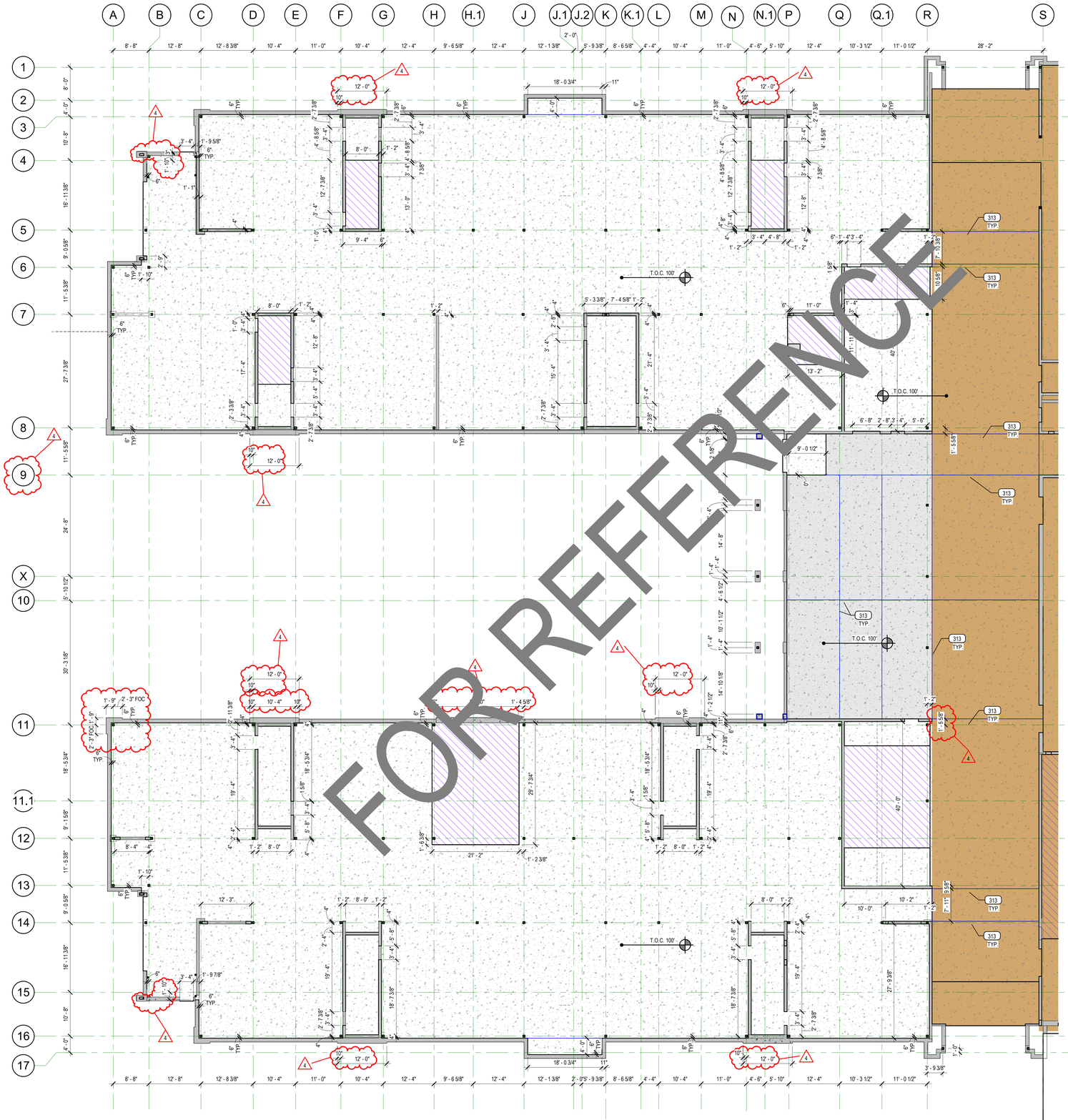


FOR REFERENCE

A5 PLAN - LEVEL 01 - SLAB EDGE - AREA'S 13 & 14

SCALE: 3/32" = 1'-0"

SLAB EDGE PLAN NOTES

1. CONTROL JOINTS SHALL BE SAW CUT AND PLACED AT CENTERLINE OF COLUMNS OR EDGE OF MASONRY/CONCRETE WALLS, SPACING PER SPECIFICATIONS UNLESS NOTED OTHERWISE ON SLAB PLANS.
2. RECESSED SLABS @ KITCHEN AND RESTROOMS ARE TO BE INSIDE FACE OF STUD (INSIDE FACE OF STUD IF AT EXTERIOR WALL, INSIDE FACE OF STUD OF ROOM IF INTERIOR).

SLAB TYPE LEGEND

2" RECESSED SLAB - 2" RECESS @ KITCHEN, 2" RECESS @ RESTROOMS

7" RECESSED SLAB - 7" RECESS @ WALK-IN FREEZER/COOLER

4" SLAB ON GRADE - 4" CONCRETE SLAB ON GRADE. SEE STRUCT. DWGS.

HIGH POLISH DENSIFIED CONCRETE - 4" DENSIFIED, POLISHED CONCRETE SLAB OVER 2" CONSTRUCTION SLAB ON GRADE. SEE STRUCT DWGS.

LINE TYPE LEGEND

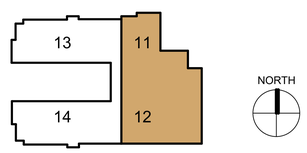
FOUNDATION WALL - INDICATES FOUNDATION WALL, AND WHERE CONCRETE WALLS DISSECT SLAB. SEE DETAIL B1/A101.1

SAWCUT JOINT - CONTROL JOINT, SAW CUT, FILL JOINTS WITH EPOXY PRIOR TO GRINDING, SEE DETAIL C1/A101.1

KEYED NOTES

313 CONTROL JOINT, SAW CUT, FILL JOINTS WITH EPOXY PRIOR TO GRINDING, SEE DETAIL C1/A101.1

KEY PLAN - MAIN LEVEL



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2	10/06/2023	BP3-ASI-01
4	10/19/2023	ASI-02

OSD HILLCREST ELEMENTARY REBUILD

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BID PACKAGE 5 - GENERAL CONSTRUCTION

SLAB EDGE PLAN - LEVEL 01 - AREA'S 13 & 14

A101.2

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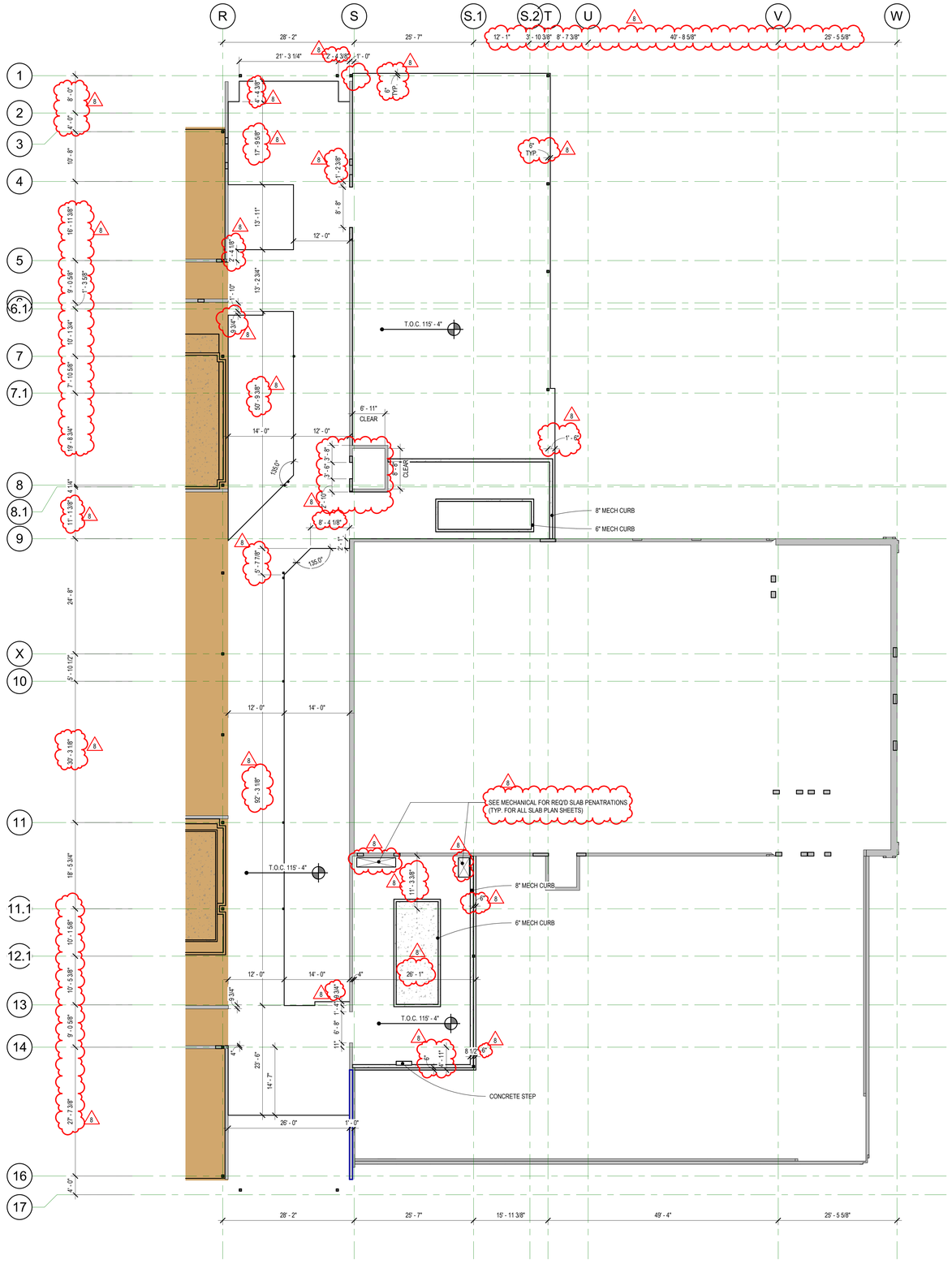


A2 PLAN - LEVEL 02 - SLAB EDGE - AREA'S 21 & 22

SCALE: 3/32" = 1'-0"

SLAB EDGE PLAN NOTES

1. CONTROL JOINTS SHALL BE SAW CUT AND PLACED AT CENTERLINE OF COLUMNS OR EDGE OF MASONRY/CONCRETE WALLS, SPACING PER SPECIFICATIONS UNLESS NOTED OTHERWISE ON SLAB PLANS.
2. RECESSED SLABS @ KITCHEN AND RESTROOMS ARE TO BE INSIDE FACE OF STUD (INSIDE FACE OF STUD IF AT EXTERIOR WALL, INSIDE FACE OF STUD OF ROOM IF INTERIOR).

SLAB TYPE LEGEND

2" RECESSED SLAB - 2" RECESS @ KITCHEN, 2" RECESS @ RESTROOMS

10" RECESSED SLAB - 10" RECESS @ WALK-IN FREEZER/COOLER

4" SLAB ON GRADE - 4" CONCRETE SLAB ON GRADE. SEE STRUCT. DWGS.

HIGH POLISH DENSIFIED CONCRETE - 4" DENSIFIED, POLISHED CONCRETE SLAB OVER 2" CONSTRUCTION SLAB ON GRADE. SEE STRUCT DWGS.

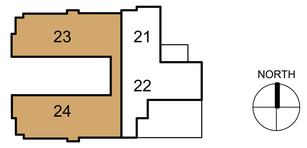
LINE TYPE LEGEND

FOUNDATION WALL - INDICATES FOUNDATION WALL, AND WHERE CONCRETE WALLS DISSECT SLAB. SEE DETAIL B1/A101.1

SAWCUT JOINT - CONTROL JOINT, SAW CUT, FILL JOINTS WITH EPOXY PRIOR TO GRINDING, SEE DETAIL C1/A101.1

KEYED NOTES

KEY PLAN - UPPER LEVEL



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STATE OF UTAH
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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SLAB EDGE PLAN - LEVEL 02 - AREA 21 & 22

A101.3

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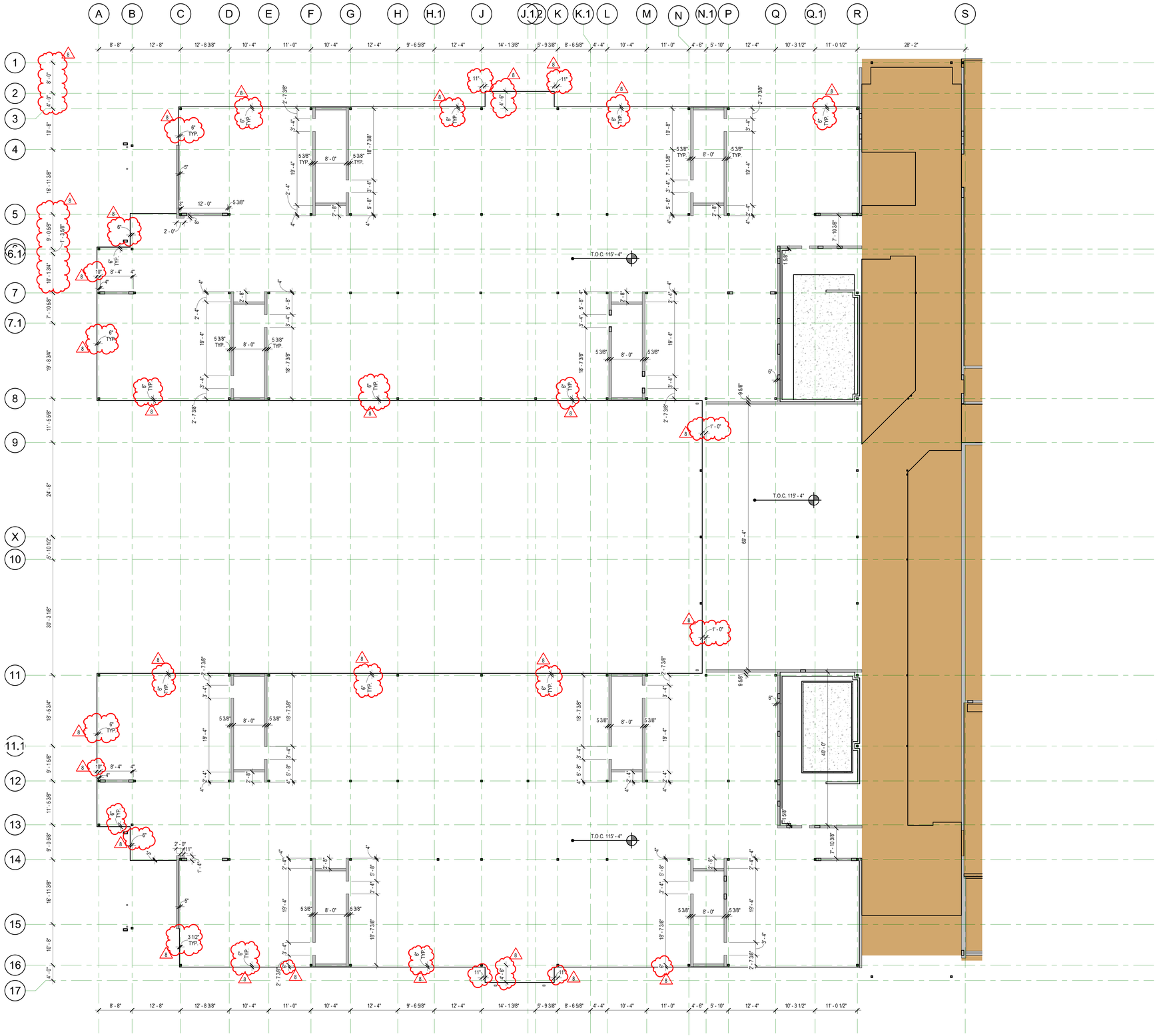


SLAB EDGE PLAN NOTES

1. CONTROL JOINTS SHALL BE SAW CUT AND PLACED AT CENTERLINE OF COLUMNS OR EDGE OF MASONRY/CONCRETE WALLS, SPACING PER SPECIFICATIONS UNLESS NOTED OTHERWISE ON SLAB PLANS.
2. RECESSED SLABS @ KITCHEN AND RESTROOMS ARE TO BE INSIDE FACE OF STUD (INSIDE FACE OF STUD IF AT EXTERIOR WALL, INSIDE FACE OF STUD OF ROOM IF INTERIOR).

SLAB TYPE LEGEND

2" RECESSED SLAB - 2" RECESS @ KITCHEN, 2" RECESS @ RESTROOMS

10" RECESSED SLAB - 10" RECESS @ WALK-IN FREEZER/COOLER

4" SLAB ON GRADE - 4" CONCRETE SLAB ON GRADE. SEE STRUCT. DWGS.

HIGH POLISH DENSIFIED CONCRETE - 4" DENSIFIED, POLISHED CONCRETE SLAB OVER 2" CONSTRUCTION SLAB ON GRADE. SEE STRUCT DWGS.

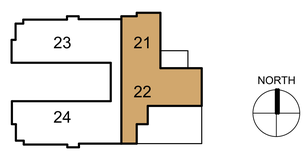
LINE TYPE LEGEND

FOUNDATION WALL - INDICATES FOUNDATION WALL, AND WHERE CONCRETE WALLS DISSECT SLAB. SEE DETAIL B1/A101.1

SAWCUT JOINT - CONTROL JOINT, SAW CUT, FILL JOINTS WITH EPOXY PRIOR TO GRINDING, SEE DETAIL C1/A101.1

KEYED NOTES

KEY PLAN - UPPER LEVEL



NOTE: ORANGE HATCH COLOR INDICATES AREA NOT SHOWN ON SHEET.

A5 PLAN - LEVEL 02 - SLAB EDGE - AREA'S 23 & 24

SCALE: 3/32" = 1'-0"

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STATE OF UTAH
JOSEPH KREFFELS PETERSEN
7067869
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

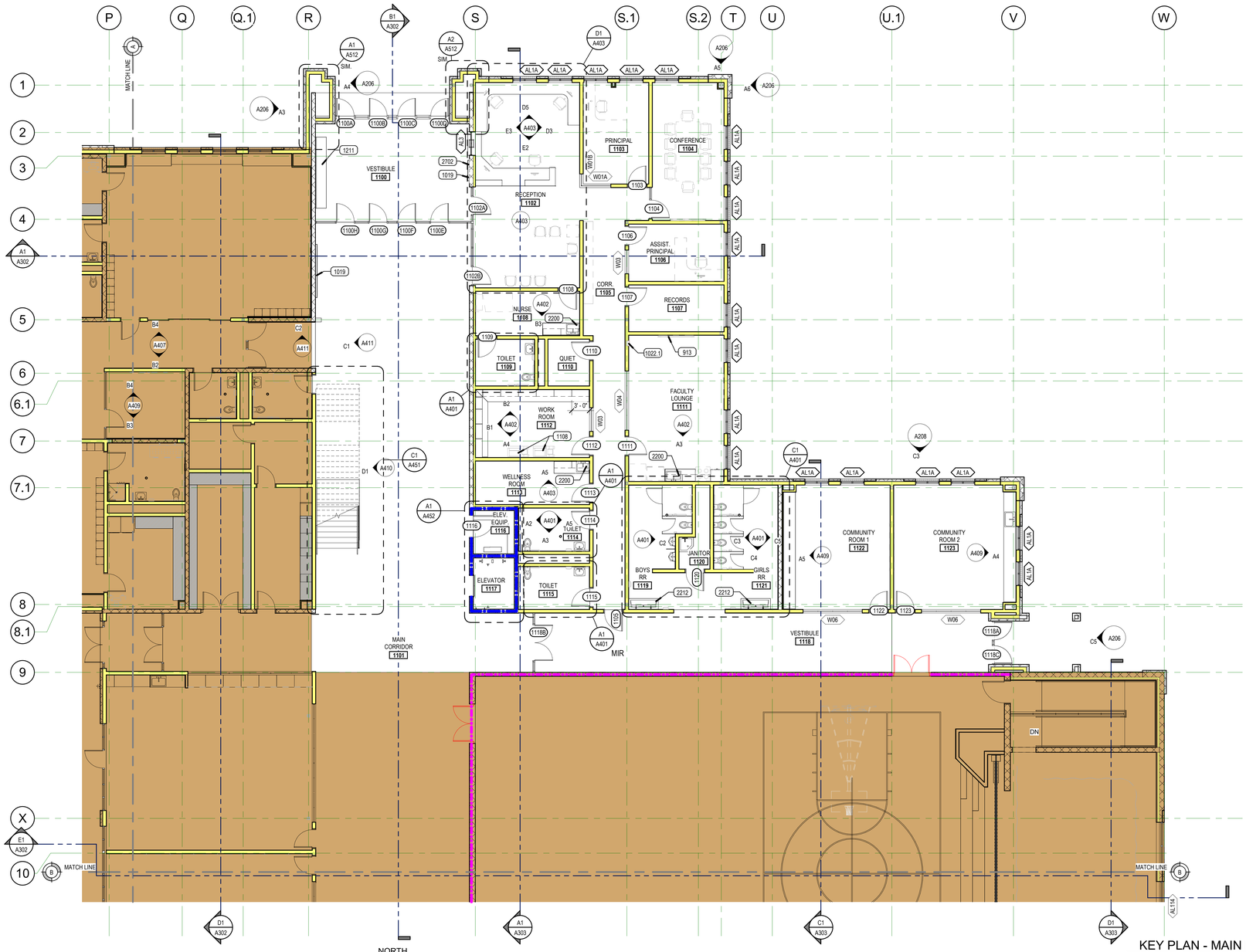
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SLAB EDGE PLAN - LEVEL 02 - AREA 23 & 24

A101.4

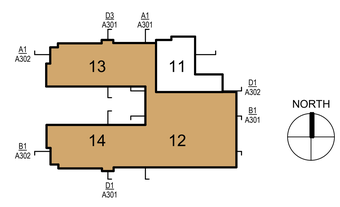
12/4/2023 3:23:41 PM



A1 ANNOTATED PLAN - LEVEL 01

SCALE: 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



KEYED NOTES

913	SCHEDULED BASE
1019	BULLETIN BOARD, 4'X 8' ANODIZED ALUMINUM FRAME, WALL MOUNTED
1022.1	FIRE EXTINGUISHER, RECESSED CABINET
1108	COPIER, NIC
1211	BENCH W/ HARDWOOD TOP AND GALVANIZED TUBE STEEL SUPPORTS, SEE DETAIL A5/A820
2200	SINK AND FAUCET
2212	SS TROUGH SINK W/SOLID SURFACE APRON
2702	AUDIO/ VISUAL DEVICE

PLAN NOTES

1. WHERE FLOOR DRAINS ARE INSTALLED THE FLOOR IS TO SLOPE TO THE DRAIN. THE MAXIMUM SLOPE IS NOT TO EXCEED 2% WHILE THE MINIMUM SLOPE IS NOT TO BE LESS THAN 1%.
2. WHERE CONCRETE PADS ARE CALLED TO BE CONSTRUCTED UNDER EQUIPMENT THE SLAB IS TO BE 8" THICK, U.N.O., AND IS TO HAVE #4 BARS AT 18" O.C. EACH WAY. COORDINATE DIMENSIONS OF PAD WITH ACTUAL EQUIPMENT SPEC
3. SEE SHEET **A880** FOR TYPICAL FLOORING TRANSITION DETAILS.
4. THE CONTRACTOR IS TO ENSURE THAT BETWEEN ANY FINISH FLOOR ELEVATION TO 36" A.F.F. ALL GUARDRAILS ARE TO BE CONSTRUCTED AND INSTALLED SO THAT A 4 3/8" SPHERE WILL NOT PASS BETWEEN ANY TWO ADJACENT GUARDRAIL COMPONENTS OR BETWEEN THE EDGE OF A GUARDRAIL AND ALL ADJACENT BUILDING ELEMENT SUCH AS A WALL OR FLOOR. AN 4 3/8" DIAMETER SPHERE IS NOT TO PASS BETWEEN THE ABOVE MENTIONED COMPONENTS AND ELEMENTS FROM AN ELEVATION 36" A.F.F. AND HIGHER.
5. SEE DETAIL **XX** AND **XX** ON SHEET **AXXX** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

PARTITION + FRAMING GENERAL NOTES

FRAMED WALL PARTITIONS

1. PARTITION TYPE INDICATIONS ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH SHEETS AND INTERIOR ELEVATIONS FOR WALL FINISHES INCLUDING TILE COURSING AND LAYOUT AND/OR THE DESIGNATIONS ON THE PLANS FOR ADDITIONAL INFORMATION REGARDING APPLIED FINISHES.
2. WHERE PARTITION TYPE DESIGNATION ON FLOOR PLANS IS INTERRUPTED BY DOOR OPENING, GLAZED PARTITION, ETC., CONSTRUCTION ABOVE INTERRUPTION (AND WHERE APPLICABLE BELOW) IS TO BE THE SAME AS THAT DESIGNATED FOR THE PARTITION IN WHICH THE INTERRUPTION OCCURRED.
3. THE MINIMUM REQUIREMENTS FOR CONSTRUCTION OF EACH PARTITION TYPE AS EXPRESSED BY THE INDICATED REFERENCE ARE INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THE WORK OF THIS PROJECT. HOWEVER, ADDITIONAL AND/OR MORE RESTRICTIVE REQUIREMENTS MAY BE INDICATED BY THE SPECIFICATIONS AND DRAWINGS. SUCH REQUIREMENTS ALSO APPLY AND SHALL GOVERN. SUCH REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   a. USE 5/8" THICK GYPSUM BOARD THROUGHOUT UNLESS NOTED OTHERWISE.
   b. USE 16" OC MAX STUD SPACING UNLESS NOTED OTHERWISE IN THESE DOCUMENTS. THE SPACING STATED BY THE REFERENCED APPROVAL OR EST REPORT IS THE MAX SPACING IF ALLOWED IN THESE DOCUMENTS.
   c. USE STUDS OF GAUGE INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. THE GAUGE STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM GAUGE TESTED, 20 GA (30 MILS) IS THE MINIMUM ALLOWED IN THESE DOCUMENTS.
4. USE STUDS OF DEPTH INDICATED BY THIS SET OF DOCUMENTS. THE DEPTH STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM DEPTH TESTED DEPTH ALLOWED IN THESE DOCUMENTS. SEE STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CONSTRUCTION OF CONCRETE, MASONRY AND STUD WALLS
5. PROVIDE FIRE RATED CONSTRUCTION ASSEMBLIES WHERE INDICATED ON SHEETS G100's AND FLOOR PLAN DRAWINGS.
6. ALL DIMENSIONS ARE CENTER OF STUD OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. FACE OF STUD WILL BE NOTED AS FOS AND FACE OF FINISHED WALL WILL BE NOTED AS FOW.
7. AT ALL INTERIOR WALLS, STUDS, INSULATION AND GYPSUM BOARD ARE TO EXTEND TO THE DECK ABOVE. UNLESS NOTED OTHERWISE.
8. WALL TYPES NOT NOTED ARE ASSUMED TO MATCH ADJACENT ROOMS. SEE SHEETS FOR FINISHES, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. ALL METAL STUD PARTITIONS ARE CONSIDERED ACOUSTIC PARTITIONS AND ARE TO RECEIVE A TYPE 1 SOUND ATTENUATION BLANKET. THICKNESS TO MATCH STUD DEPTH, UNLESS NOTED OTHERWISE.
10. REFER TO SHEET **A520** FOR TYPICAL INTERIOR WALL CONDITIONS ASSOCIATED WITH ALL METAL STUD PARTITIONS.
11. PROVIDE CONTROL JOINTS IN METAL FRAMED WALLS AT APPROXIMATELY 30 FEET ON CENTER. LOCATE AT CORNER ABOVE DOORS OR INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. **CONSULT WITH ARCHITECT PRIOR TO COMMENCING FRAMING.** INSTALL PER DETALS **C2 AND C3/ A520** FOR CONTROL JOINTS.
12. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., GYPSUM BOARD IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM. THE OPENING FOR DUCTS OR LARGE PENETRATIONS SHALL BE FRAMED WITH A HEADER, ADD AN ANGLED CORNER BRACE IF THE GAP EXCEEDS 3" FROM FRAMING TO THE OPENING.
13. PROVIDE BLOCKING / BACKING FOR ALL WALL MOUNTED EQUIPMENT. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR CABINETS, GRAB BARS ETC. INSTALL BLOCKING AS DETAILED OR AS REQUIRED TO MOUNT SUCH DEVICES. ALL BLOCKING IS TO BE FIRE RETARDANT TREATED. INSTALL PER SHEET **A520**
14. **WHERE THERE IS LIMITED WATER EXPOSURE:** INSTALL ONE LAYER OF 5/8" TYPE X WATER RESISTANT GYPSUM BOARD PER ASTM C1396 (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION AT THE FOLLOWING LOCATIONS.
   a. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITORS SINKS
   b. AT OTHER LOCATIONS, I.E. TOILET ROOMS AND KITCHENS, AND AS INDICATED ON THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
15. INSTALL ONE LAYER OF 5/8" GLASS MAT TILE BACKER BOARD IN LIEU OF GYPSUM BOARD (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION WHERE THERE IS NO FIRE RATING AND OVER GYPSUM BOARD FACE LAYER AT FIRE RATED PARTITIONS AT THE FOLLOWING LOCATIONS.
16. AT WET LOCATIONS, SUCH AS SHOWER STALLS AND TUB SURROUNDS.
   a. WHERE CERAMIC TILE FINISHES ARE INDICATED PER THE FINISH PLANS AND/OR INTERIOR ELEVATIONS.
   b. AT OTHER LOCATIONS AS INDICATED BY THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
17. WHERE NEW WALLS OR FURRING ARE INDICATED TO BE DIMENSIONED OFF OF AN EXISTING WALL, THE NEW WALL SHALL BE STRAIGHT AND PLUMB REGARDLESS OF THE CONDITION OF THE EXISTING WALL.
18. ALL EXTERIOR STUD WALLS TO HAVE CONTINUOUS INSULATION, VAPOR BARRIER AND AIR INFILTRATION BARRIER FOR THE FULL HEIGHT AND LENGTH OF THE WALL,SEAL ALL PENETRATIONS. SEE DETAILS ON SHEET **A520** FOR TYPICAL TOP OF WALL CONDITION
19. THE AIR INFILTRATION BARRIER IS TO WRAP INTO ALL WINDOW AND DOOR OPENINGS.
20. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

MASONRY OR CONCRETE WALLS

1. SEE STRUCTURAL PLANS FOR ADDITIONAL CONCRETE AND MASONRY WALL INFORMATION.
2. SEE EXTERIOR ELEVATIONS FOR COURSING, MASONRY TYPES AND METAL PANEL ORIENTATION PER **EXTERIOR ELEVATION SHEETS.**
3. ALL MASONRY WALLS ARE TO BE REINFORCED AND ARE TO BE SET ON REINFORCED FOOTINGS. SEE THE **EXTERIOR ELEVATION SHEETS** FOR LOCATION OF CONTROL JOINTS. WHERE NOT NOTED, CONTROL JOINTS TO BE LOCATED AS PER THE REQUIREMENTS FOUND IN THE STRUCTURAL DOCUMENTS BUT ARE NOT TO EXCEED 30' OC. SEE THE STRUCTURAL DRAWINGS FOR REINFORCING AND OTHER DETAILS PERTAINING TO MASONRY WALLS. IF NOT OTHERWISE NOTED, LOCATE CONTROL JOINTS AT CORNER ABOVE DOORS, INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. CONSULT WITH ARCHITECT PRIOR TO INSTALLING PER DETAIL **C1/ A520**
4. SEE IBC 2021, CHAPTER 7 FOR FIRE RESISTIVE REQUIREMENTS ON NEW CONCRETE AND CONCRETE MASONRY UNIT WALLS.
   - CMU WALLS (IBC TABLE 721.1(2), ITEM 3)
   - CAST IN PLACE CONCRETE WALLS (IBC TABLE 722.2.1.1)
5. REFER TO DETAIL SHEET **A520** FOR TYPICAL WALL CONDITIONS ASSOCIATED WITH ALL AND MASONRY PARTITIONS.
6. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., MASONRY IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM.
7. **PROTECTION OF MASONRY:** DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK, EXCEPT WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO REMAIN ABOVE 65 DEG F AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS. (THIS IS TO PREVENT CONDENSATION FROM COVERED WALLS CAUSING A MOISTURE PROBLEM.) COVER PARTIALLY COMPLETED MASONRY EACH DAY THAT CONSTRUCTION IS NOT IN PROGRESS. WALLS ARE TO BE PROTECTED UNTIL THEY ARE PERMANENTLY PROTECTED BY THE ROOFING MEMBRANE OVER THE CAP PLATE. THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY PROTECTION IMMEDIATELY FOLLOWING THE TOPPING OUT OF EACH SECTION OF WALL BY INSTALLING WATERPROOF SHEETING OVER A CONTINUOUS CAP PLATE UNTIL THE ROOFING MEMBRANE IS INSTALLED. **A SOLID GROUTED TOP BOND BEAM SHALL NOT BE CONSIDERED ADEQUATE PROTECTION FOR THE WALL.**
8. IT IS ACCEPTABLE TO PLACE NON-INTEGRAL COLORED CMU IN PORTIONS OF WALLS INDICATED TO BE CONSTRUCTED OF INTEGRAL COLOR CMU IF THE DOCUMENTS SHOW THESE PORTIONS OF WALL PAINTED OR COVERED WITH TILE, STUD FURRING, ABOVE CEILINGS OR UNDER ROOFING MEMBRANE. IT IS NOT ACCEPTABLE TO UTILIZE NON INTEGRAL COLORED CMU BEHIND CABINETS, FURNISHINGS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CLIMBING WALLS AND LOCKERS.
9. AT ALL SPLIT FACE AND PAINTED CMU THE HORIZONTAL AND VERTICAL MORTAR JOINTS ARE TO BE CONCAVE. AT ALL HONED BLOCK THE HORIZONTAL MORTAR JOINT IS TO BE A WEATHERED JOINT AND ALL VERTICAL JOINTS ARE TO BE RAKED.
10. PROVIDE A 3/4" CHAMFER ALL INTERIOR EXPOSED VERTICAL MASONRY CORNERS FROM 8" AFF TO BOTTOM OF MASONRY LINTEL OR IF NO LINTEL EXISTS, STOP CHAMFER @ FIRST MASONRY JOINT BELOW CEILING. NOTE THAT THIS CHAMFER IS NOT TO BE PROVIDED AT CORNERS SHOWN IN THESE DOCUMENTS AS COVERED WITH WALL TILE. SEE DETAIL
11. **PROVIDE SPECIAL SHAPES**, SUCH AS "U" SHAPED CHANNEL FOR LINTELS OR HEADERS AND CAPPING UNITS FOR SASH AND OTHER SPECIAL CONDITIONS.
12. WHERE SPLIT FACE BLOCK IS SHOWN EXTENDING TO THE TOP OF A PARAPET, PROVIDE AN INTEGRAL COLOR SMOOTH FACE BLOCK AT THE TOP COURSE TO ALLOW THE CAP FLASHING TO FIT TIGHT AGAINST THE WALL.
13. CONTRACTOR TO COORDINATE AND PROVIDE SMOOTH MASONRY AT ALL FLASHING, REGLETS, GUTTERS, EDGES OF CEILING AND BASE AND OTHER ITEMS REQUIRING A SMOOTH FINISH THAT ARE HIDDEN.

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH — 7067869 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 11 ENLARGED ANNOTATED PLAN - LEVEL 01

A111.1

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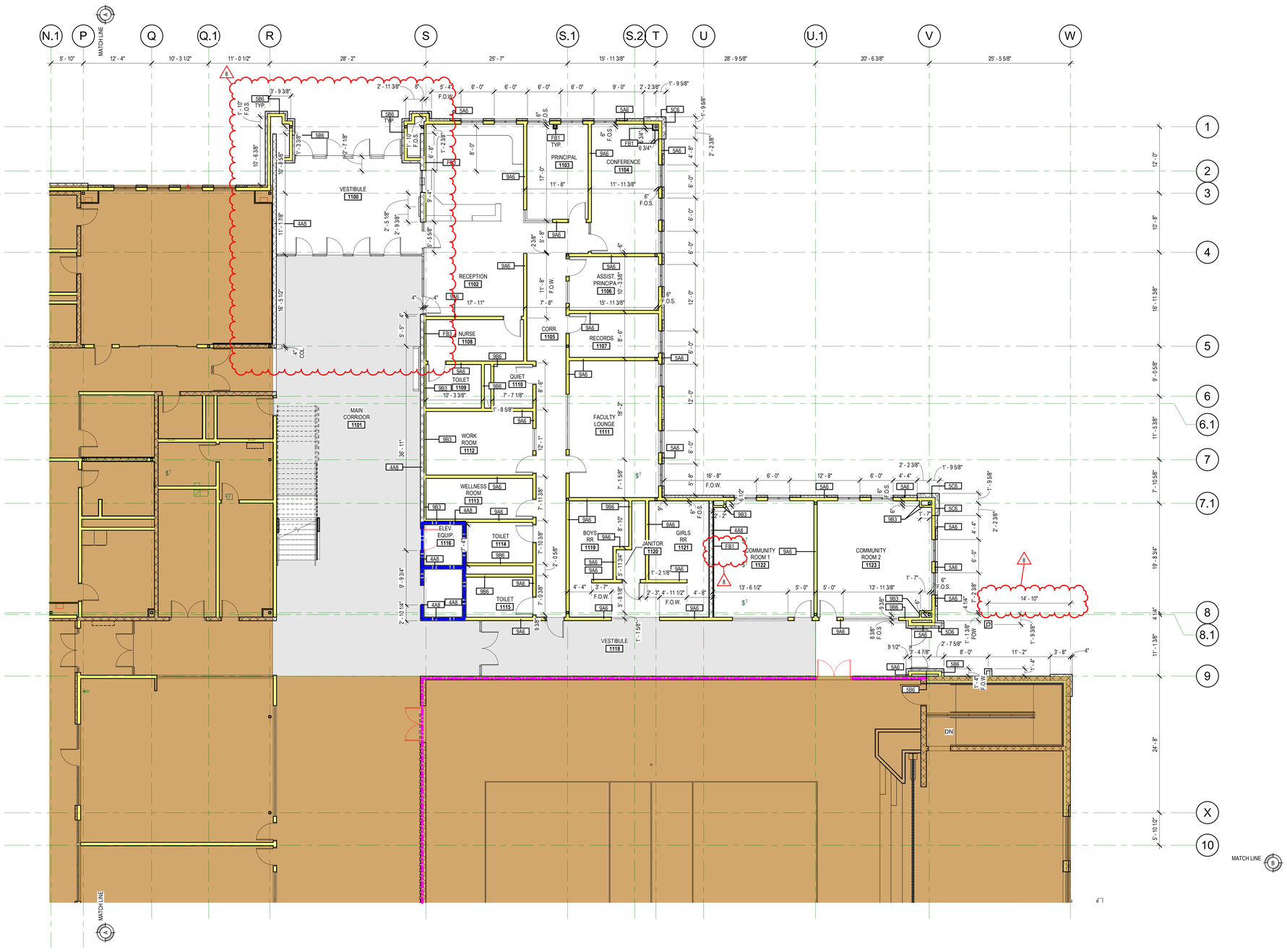
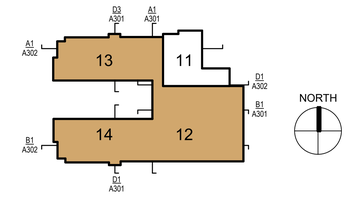


A1 PLAN - LEVEL 01 - DIMENSION + WALL TYPE

SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - MAIN LEVEL



DIMENSION NOTES

1. ALL DIMENSIONS ARE TO CENTER OF STUD WALL OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. WHERE THE END OF A WALL IS INDICATED THE DIMENSION IS TO THE FINISH SURFACE OF THE WALL END.
2. UNLESS DIMENSIONED OTHERWISE, THE DIMENSION FROM THE BUCK OF A DOOR FRAME IS TO BE 4" TO THE WALL CORNER.
3. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN, DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED.
4. SMOKE AND FIRE RATED WALLS SHALL PERMANENTLY BE IDENTIFIED WITH SIGNS OR STENCILING IN THE CONCEALED SPACE. SUCH IDENTIFICATION SHALL BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8-INCH STROKE IN A CONTRASTING COLOR INCORPORATING THE WORDING, "FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS"

KEY FOR PARTITION TYPES

SEE SHEET A500 FOR WALL TYPE DETAILS AND NOTES

DENOTES TYPE OF CONSTRUCTION (SPEC. DIVISION) — WALL

4A8

3X 0 SERIES CONCRETE
4X 0 SERIES MASONRY
5X 0 SERIES COLD FORMED METAL STUDS, 16 GA MIN.
9X 0 SERIES METAL STUDS

NOMINAL SIZES: V = VARIABLE/MATCHEXISTING
1 = 1 5/8" STUDS
2 = 2 1/2" STUDS
3 = 3 5/8" STUDS
4 = 4" STUDS / 4" (NOM.) C.M.U.
6 = 6" STUDS / 6" (NOM.) C.M.U.
8 = 8" STUDS / 8" (NOM.) C.M.U.
10 = 10" (NOM.) C.M.U. OR CONC.
12 = 12" (NOM.) C.M.U. OR CONC.

EXAMPLE: WALL TYPE 9A3 IS A 3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD ON BOTH SIDES.

RATED WALL LEGEND

- INCIDENTAL USE AREAS
- 1 HOUR SEPARATION
- 2 HOUR SEPARATION
- 3 HOUR SEPARATION

EXAMPLE: WALL TYPE 9A3-1 IS A ONE HOUR RATED, 3 5/8" METAL STUD WALL WITH 5/8" GYPSUM BOARD ON BOTH SIDES, PER ASSEMBLY REQUIREMENTS.

90X-R SERIES
FIRE RATING (ONLY WHEN NOTED): 1 = 1 HOUR RATED ASSEMBLY
2 = 2 HOUR RATED ASSEMBLY
3 = 3 HOUR RATED ASSEMBLY

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CLIENT NUMBER: -
DATE: DECEMBER 08, 2023

STATE OF UTAH — JOSEPH GREEN PETERSEN — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 11 ENLARGED
DIMENSION + WALL TYPE
PLAN - LEVEL 01

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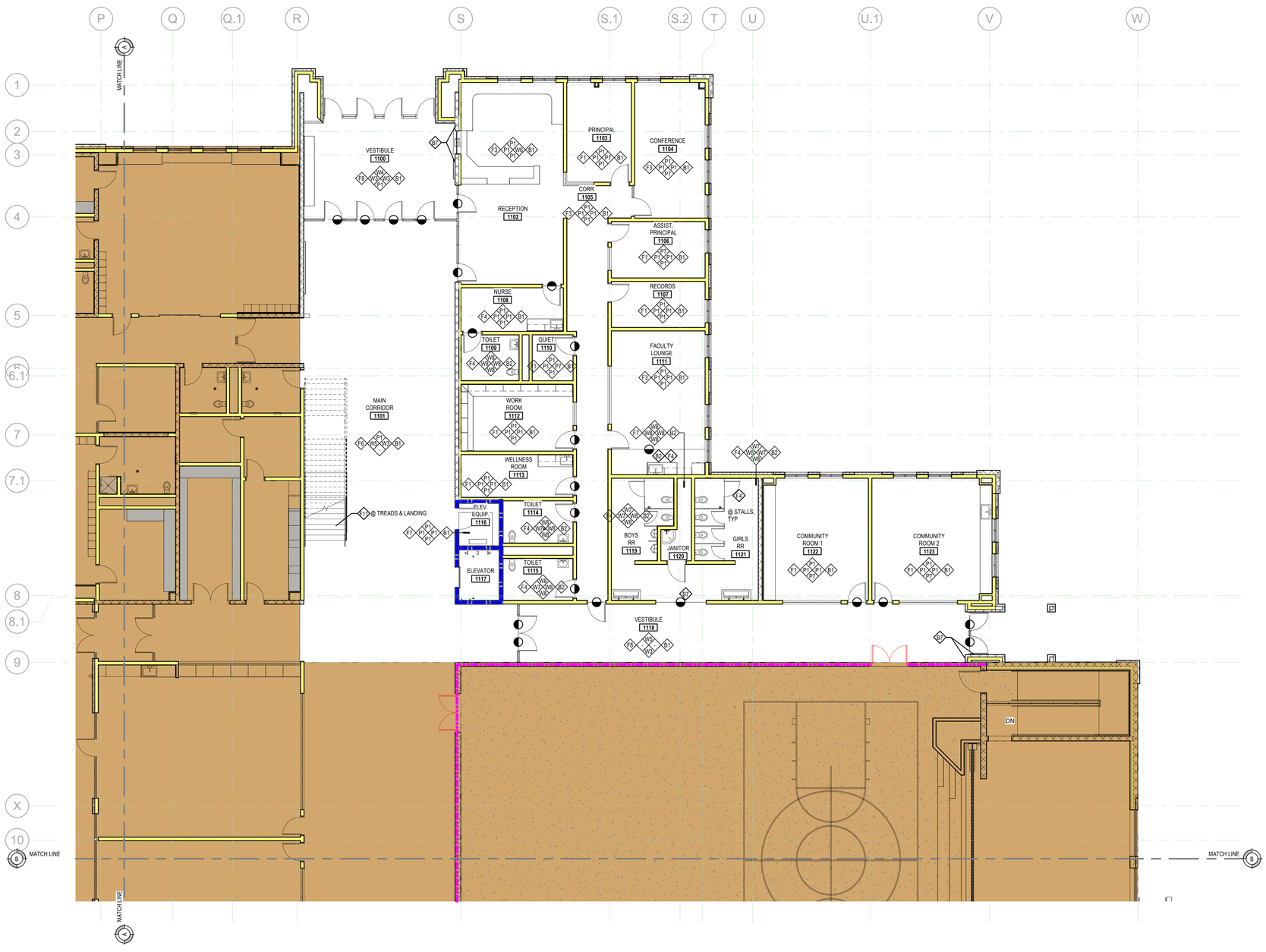
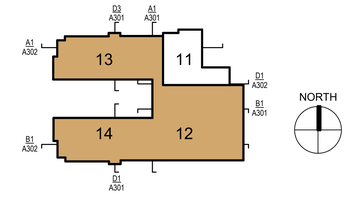


A1 AREA 11 FINISH PLAN

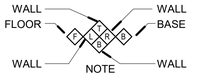
SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - MAIN LEVEL



FINISH PLAN SYMBOLS



SINGLE FINISH SYMBOLS INDICATE WHERE FINISHES ARE DIFFERENT FROM GENERAL ROOM FINISHES, OR PROVIDE ADDITIONAL FINISH INFORMATION

CHANGE AT FLOOR MATERIAL

IN ANY SPACE WHERE FINISHES ARE NOT DESIGNATED, ASSUME THE FOLLOWING FINISHES:

B2 4" RUBBER BASE
F1 CARPET TILES - GENERAL FIELD - LAID IN LINEAR BRICK PATTERN
W1: PRIMED & PAINTED WALL - GENERAL COLOR - EPOXY PAINT IN WE/DAMP AREAS
W3: SEALED CMU WHERE CMU IS PRESENT

GENERAL FINISH NOTES

1. PROVIDE EPOXY PAINT AT ALL RESTROOMS, SHOWERS, LOCKER ROOMS AND JANITOR CLOSETS.
2. ALL PAINTED STEEL BRACING AND COLUMNS TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. AT SOFFITS RECEIVING COLOR - PAINT ALL SIDES OF SOFFIT.
4. ALL METAL GUARDRAILS AND STAIR STRINGERS TO BE PAINTED SEE FINISH SCHEDULE FOR H.M. DOOR AND FRAME PAINT COLORS.
5. ALL EXPOSED CEILINGS TO BE PAINTED. REFER TO REFLECTED CEILING PLANS.
6. ALL FLOOR TRANSITIONS TO BE LOCATED AT CENTER OF DOOR, U.N.O. ALL FLOOR TRANSITIONS AT FLOOR TILE (T1) LOCATIONS TO BE LOCATED AT INSIDE CORNER OF DOOR.
7. PROVIDE FLOOR FINISH 'RT: RUBBER STAIR TREAD' AT STAIR TREADS AND LANDING.
8. PROVIDE A SMOOTH TRANSITION AT ALL FLOOR MATERIALS - CONTRACTOR TO INSTALL ALL FLOOR FINISHES AT SAME LEVEL, DESPITE DIFFERENT THICKNESS. PROVIDE FLOOR TRANSITION WHERE OCCURS.
9. SEE SHEET AXXX FOR FLOORING TRANSITION DETAILS.
10. SEE ELEVATION SHEETS FOR ALL WALL TILE PATTERNS.
11. PROVIDE TILE 4"X4" CERAMIC WALL TILE AT ALL JANITOR SINKS UNLESS NOTED OTHERWISE. PROVIDE TILE BULLNOSE TO FINISH OFF ALL EXPOSED EDGES.
12. ALL WALLS RECEIVING TILE WAINSCOT TO RECEIVE PAINT P1 ABOVE, U.N.O. SEE FINISH PLANS FOR ACCENT WALL LOCATIONS.
13. ALL GROUT JOINTS TO BE NO LARGER THAN 1/8".
14. PROVIDE 'CG: CORNER GUARD' AT ALL LOCATIONS WHERE TILE WAINSCOT WRAPS GYP. BD. CORNERS. CAP ALL TILE WAINSCOT WITH SCHLUTER STRIP (SL).
15. AT ALL TILE WAINSCOT, SCRIBE BOTTOM TILE TO MATCH FINISH FLOOR SURFACE AND CAULK WITH BASE 'RB'.
16. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF MILLWORK.
17. COORDINATE ALL MILLWORK WITH APPLIANCES BEFORE FABRICATION.
18. ALL COUNTERTOP, BACKSPLASHES, AND EDGE BANDING TO HAVE COORDINATING FINISHES.
19. ALL WOOD TRIM TO BE STAINED TO MATCH DOOR STAIN.

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STATE OF UTAH
JASON SHEARER
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 11 ENLARGED FINISH PLAN - LEVEL 01

A111.3

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HEADER SCHEDULE

H1	GYP. HEADER
H2	MASONRY HEADER

GENERAL CEILING NOTES

1. REFER TO DETAIL **C6/A530** FOR TYPICAL CEILING SUSPENSION & SEISMIC BRACING
2. REFER TO DETAIL **A6/A530** FOR TYPICAL SUSPENDED GYP. BOARD CEILINGS
3. ALL UNIDENTIFIED CEILING TYPES ON THE PLANS SHALL BE TYPE " A" AT 9'-4" A.F.F.
4. GRID SUSPENSION SYSTEMS SHALL BE CENTERED WITHIN AREAS INDICATED, UNLESS NOTED OTHERWISE
5. PAINT ALL EXPOSED STRUCTURE, MECHANICAL, DUCTS, ELECTRICAL WORK, PIPING, ETC. ALL VISIBLE ELEMENTS TO BE PAINTED AT TYPE "E" & TYPE "F" (ABOVE VENTWOOD)
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF MECHANICAL GRILLES, AND TO MECHANICAL DRAWINGS FOR QUANTITIES AND TYPES
7. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF LIGHT FIXTURES AND TO ELECTRICAL DRAWINGS FOR QUANTITY AND TYPES
8. MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE WORK WITH SPRINKLER CONTRACTOR TO AVOID CONFLICTS IN FIELD
9. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
10. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED.
11. HEADER HEIGHTS TO BE 9'-0" UNO.
12. CEILING TILE SHALL BE LISTED & TESTED ASTM E 84 & HAVE A FLAME SPREAD OF 0-25 & A SMOKE INDEX OF 0-450. IF THE CEIING TILE IS A COMPONENT PART OF A PLENUM SYSTEM THEN IT SHALL BE LISTED & TESTED PER ASTM E 84 & HAVE A FLAME SPREAD F 0-25 & A SMOKE INDEX OF 0-50.

CEILING LEGEND

- A - SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
- B - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING
- C - SUSPENDED 5/8" GYP. BD. CEILING SYSTEM - PAINTED (EPOXY PAINT AT WET LOCATIONS)
- D - SUSPENDED 5/8" GYP. CEILING SYSTEM (2 LAYERS) , PAINTED - 1 HOUR RATED
- E - OPEN TO STRUCTURE ABOVE
- F - SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH HOLD DOWN CLIPS
- G - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING (VINYL COATED)
- H - SUSPENDED WOOD PANEL CEILING SYSTEM
- I - EXTERIOR METAL SOFFIT SYSTEM. APPLY 3" CLOSED CELL SPRAY FOAM INSULATION ON UNDERSIDE OF DECK, WHERE OCCURS.
- J - SPRAY APPLIED ACOUSTICAL TREATMENT ON METAL DECK, WHITE - PAINT ALL BUILDING STRUCTURE, OVERHEAD MEP, ETC TO MATCH INSULATION COLOR

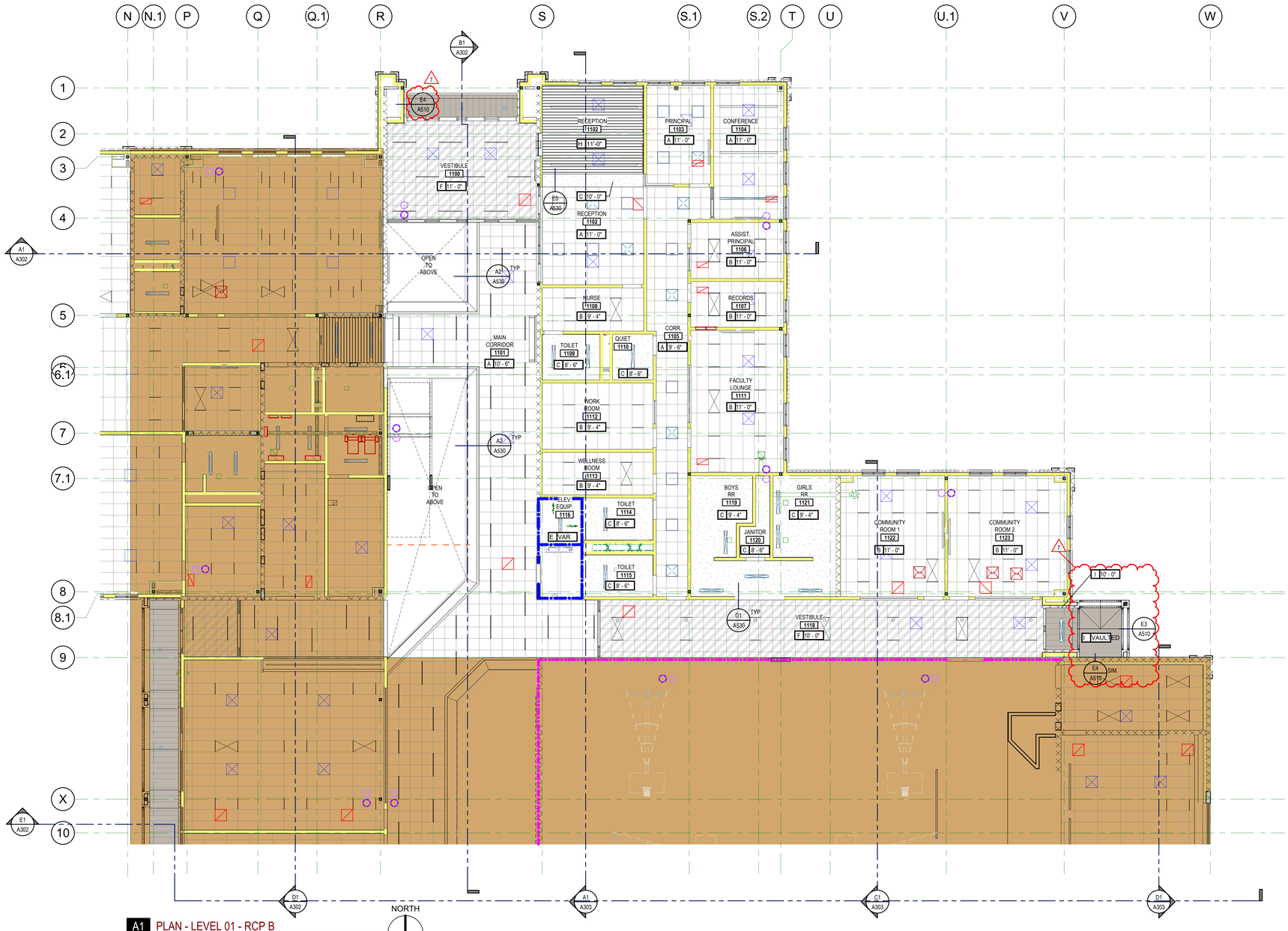
CEILING SYMBOLS

ELECTRICAL

- 2'X4' FLUORESCENT FIXTURE
- 2'X2' FLUORESCENT FIXTURE
- 1'X4' FLUORESCENT FIXTURE
- FLUORESCENT STRIP FIXTURE
- RECESSED DOWN LIGHT
- WALL WASH
- 1'X4' FLUORESCENT FIXTURE
- PENDANT LIGHT FIXTURE
- EXIT SIGN, SINGLE-SIDED
- EXIT SIGN, DOUBLE-SIDED
- FIRE ALARM
- SPEAKER
- SMOKE DETECTOR
- WIRELESS INTERNET

MECHANICAL

- SUPPLY GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- SPRINKLER HEAD - CEILING MOUNT
- SPRINKLER HEAD - WALL MOUNT

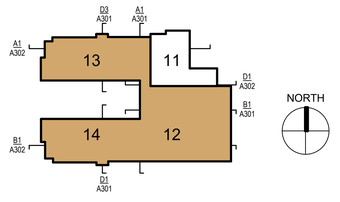


A1 PLAN - LEVEL 01 - RCP B

SCALE: 1/8" = 1'-0"

KEYED NOTES

KEY PLAN - MAIN LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH
SHEA WILSON
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 11 ENLARGED REFLECTED CEILING PLAN - LEVEL 01

A111.4

11/27/2023 12:43:04 PM

PLAN NOTES

1. WHERE FLOOR DRAINS ARE INSTALLED THE FLOOR IS TO SLOPE TO THE DRAIN. THE MAXIMUM SLOPE IS NOT TO EXCEED 2% WHILE THE MINIMUM SLOPE IS NOT TO BE LESS THAN 1%.
2. WHERE CONCRETE PADS ARE CALLED TO BE CONSTRUCTED UNDER EQUIPMENT THE SLAB IS TO BE 8" THICK, U.N.O., AND IS TO HAVE #4 BARS AT 18" O.C. EACH WAY. COORDINATE DIMENSIONS OF PAD WITH ACTUAL EQUIPMENT SPEC.
3. ALL MECHANICAL ROOMS TO RECEIVE A CONCRETE CURB AROUND INSIDE PERIMETER WALLS. SEE SHEET A573 FOR CURB DETAILS
4. SEE SHEET **A573** AND **A574** FOR TYPICAL FLOORING TRANSITION DETAILS.
5. THE CONTRACTOR IS TO ENSURE THAT BETWEEN ANY FINISH FLOOR ELEVATION TO 36" A.F.F. ALL GUARDRAILS ARE TO BE CONSTRUCTED AND INSTALLED SO THAT A 4 3/8" SPHERE WILL NOT PASS BETWEEN ANY TWO ADJACENT GUARDRAIL COMPONENTS OR BETWEEN THE EDGE OF A GUARDRAIL AND ALL ADJACENT BUILDING ELEMENT SUCH AS A WALL OR FLOOR. AN 4 3/8" DIAMETER SPHERE IS NOT TO PASS BETWEEN THE ABOVE MENTIONED COMPONENTS AND ELEMENTS FROM AN ELEVATION 36" A.F.F. AND HIGHER.
6. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

KEYED NOTES

306	CONCRETE HOUSEKEEPING PAD, PROVIDE FLOOR FINISH NOTED IN ROOM ON ALL SIDES AND TOP OF PAD.
611	16" ADJUSTABLE SHELVING, U.N.O.
619	24" ADJUSTABLE SHELVING, U.N.O.
804	OVERHEAD COILING DOOR
926	BASKETBALL AND VOLLEYBALL GAME STRIPING, LASER CUT. TO BE POSITIONED OFF OF BASKETBALL STANDARDS.
1018	ACCORDION FOLDING PARTITION
1019	BULLETIN BOARD, 4'X 8' ANODIZED ALUMINUM FRAME, WALL MOUNTED
1022.1	FIRE EXTINGUISHER, RECESSED CABINET
1023	FIRE EXTINGUISHER, TYPE K, WALL MOUNTED
1023.1	FIRE EXTINUISHER, TYPE K, RECESSED CABINET
1033	AED CABINET W/AUDIBLE ALARM, SEMI-RECESSED. 14"X14"X7"
1035	STOP BLEED KIT/CABINET, SEMI RECESSED
1035.1	FIRST AID CABINET, SEMI RECESSED
1103	SPLIT BACK CURTAIN WITH HEAVY DUTY CURVING TRACK
1104	SPLIT FRONT CURTAIN WITH HEAVY DUTY TRACK
1105	ADJUSTABLE BASKETBALL STANDARD, MOTORIZED RETRACTABLE, FRONT FOLDING
1116	CURTAIN PULLEY LOCATION
1126	RECESSED, IN-GROUND VOLLEYBALL SLEEVE WITH FLUSH METAL COVER, TYP
1127	WASHER
1128	DRYER
1131	FLOOR WASHING EQUIPMENT, FUTURE BY OWNER
1133	FLAMMABLE CABINET, (2) STACKED 36" W X 24" D X 35" H
2201	JANITOR'S SINK

PARTITION + FRAMING GENERAL NOTES

FRAMED WALL PARTITIONS

1. PARTITION TYPE INDICATIONS ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH SHEETS AND INTERIOR ELEVATIONS FOR WALL FINISHES INCLUDING TILE COURSING AND LAYOUT AND/OR THE DESIGNATIONS ON THE PLANS FOR ADDITIONAL INFORMATION REGARDING APPLIED FINISHES.
2. WHERE PARTITION TYPE DESIGNATION ON FLOOR PLANS IS INTERRUPTED BY DOOR OPENING, GLAZED PARTITION, ETC., CONSTRUCTION ABOVE INTERRUPTION (AND WHERE APPLICABLE BELOW) IS TO BE THE SAME AS THAT DESIGNATED FOR THE PARTITION IN WHICH THE INTERRUPTION OCCURRED.
3. THE MINIMUM REQUIREMENTS FOR CONSTRUCTION OF EACH PARTITION TYPE AS EXPRESSED BY THE INDICATED REFERENCE ARE INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THE WORK OF THIS PROJECT. HOWEVER, ADDITIONAL AND/OR MORE RESTRICTIVE REQUIREMENTS MAY BE INDICATED BY THE SPECIFICATIONS AND DRAWINGS. SUCH REQUIREMENTS ALSO APPLY AND SHALL GOVERN. SUCH REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   a. USE 5/8" THICK GYPSUM BOARD THROUGHOUT UNLESS NOTED OTHERWISE.
   b. USE 16" OC MAX STUD SPACING UNLESS NOTED OTHERWISE IN THESE DOCUMENTS. THE SPACING STATED BY THE REFERENCED APPROVAL OR EST REPORT IS THE MAX SPACING IF ALLOWED IN THESE DOCUMENTS.
   c. USE STUDS OF GAUGE INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. THE GAUGE STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM GAUGE TESTED, 20 GA (30 MILS) IS THE MINIMUM ALLOWED IN THESE DOCUMENTS.
4. USE STUDS OF DEPTH INDICATED BY THIS SET OF DOCUMENTS. THE DEPTH STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM DEPTH TESTED DEPTH ALLOWED IN THESE DOCUMENTS. SEE STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CONSTRUCTION OF CONCRETE, MASONRY AND STUD WALLS
5. PROVIDE FIRE RATED CONSTRUCTION ASSEMBLIES WHERE INDICATED ON SHEETS G100's AND FLOOR PLAN DRAWINGS.
6. ALL DIMENSIONS ARE CENTER OF STUD OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. FACE OF STUD WILL BE NOTED AS FOS AND FACE OF FINISHED WALL WILL BE NOTED AS FOW.
7. AT ALL INTERIOR WALLS, STUDS, INSULATION AND GYPSUM BOARD ARE TO EXTEND TO THE DECK ABOVE. UNLESS NOTED OTHERWISE.
8. WALL TYPES NOT NOTED ARE ASSUMED TO MATCH ADJACENT ROOMS. SEE SHEETS FOR FINISHES, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. ALL METAL STUD PARTITIONS ARE CONSIDERED ACOUSTIC PARTITIONS AND ARE TO RECEIVE A TYPE 1 SOUND ATTENUATION BLANKET. THICKNESS TO MATCH STUD DEPTH, UNLESS NOTED OTHERWISE.
10. REFER TO SHEET **A520** FOR TYPICAL INTERIOR WALL CONDITIONS ASSOCIATED WITH ALL METAL STUD PARTITIONS.
11. PROVIDE CONTROL JOINTS IN METAL FRAMED WALLS AT APPROXIMATELY 30 FEET ON CENTER. LOCATE AT CORNER ABOVE DOORS OR INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. **CONSULT WITH ARCHITECT PRIOR TO COMMENCING FRAMING.** INSTALL PER DETAILS **C2** AND **C3/ A520** FOR CONTROL JOINTS.
12. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., GYPSUM BOARD IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM. THE OPENING FOR DUCTS OR LARGE PENETRATIONS SHALL BE FRAMED WITH A HEADER, ADD AN ANGLED CORNER BRACE IF THE GAP EXCEEDS 3" FROM FRAMING TO THE OPENING.
13. PROVIDE BLOCKING / BACKING FOR ALL WALL MOUNTED EQUIPMENT. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR CABINETS, GRAB BARS ETC. INSTALL BLOCKING AS DETAILED OR AS REQUIRED TO MOUNT SUCH DEVICES. ALL BLOCKING IS TO BE FIRE RETARDANT TREATED. INSTALL PER SHEET **A520**
14. **WHERE THERE IS LIMITED WATER EXPOSURE:** INSTALL ONE LAYER OF 5/8" TYPE X WATER RESISTANT GYPSUM BOARD PER ASTM C1396 (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION AT THE FOLLOWING LOCATIONS:
   a. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITORS SINKS
   b. AT OTHER LOCATIONS, I.E. TOILET ROOMS AND KITCHENS, AND AS INDICATED ON THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
15. INSTALL ONE LAYER OF 5/8" GLASS MAT TILE BACKER BOARD IN LIEU OF GYPSUM BOARD (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION WHERE THERE IS NO FIRE RATING AND OVER GYPSUM BOARD FACE LAYER AT FIRE RATED PARTITIONS AT THE FOLLOWING LOCATIONS.
16. AT WET LOCATIONS, SUCH AS SHOWER STALLS AND TUB SURROUNDS.
   a. WHERE CERAMIC TILE FINISHES ARE INDICATED PER THE FINISH PLANS AND/OR INTERIOR ELEVATIONS.
   b. AT OTHER LOCATIONS AS INDICATED BY THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
17. WHERE NEW WALLS OR FURRING ARE INDICATED TO BE DIMENSIONED OFF OF AN EXISTING WALL, THE NEW WALL SHALL BE STRAIGHT AND PLUMB REGARDLESS OF THE CONDITION OF THE EXISTING WALL.
18. ALL EXTERIOR STUD WALLS TO HAVE CONTINUOUS INSULATION, VAPOR BARRIER AND AIR INFILTRATION BARRIER FOR THE FULL HEIGHT AND LENGTH OF THE WALL.SEAL ALL PENETRATIONS. SEE DETAILS ON SHEET **A520** FOR TYPICAL TOP OF WALL CONDITION
19. THE AIR INFILTRATION BARRIER IS TO WRAP INTO ALL WINDOW AND DOOR OPENINGS.
20. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

MASONRY OR CONCRETE WALLS

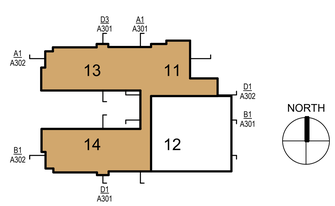
1. SEE STRUCTURAL PLANS FOR ADDITIONAL CONCRETE AND MASONRY WALL INFORMATION.
2. SEE EXTERIOR ELEVATIONS FOR COURSING, MASONRY TYPES AND METAL PANEL ORIENTATION PER **EXTERIOR ELEVATION SHEETS.**
3. ALL MASONRY WALLS ARE TO BE REINFORCED AND ARE TO BE SET ON REINFORCED FOOTINGS. SEE THE **EXTERIOR ELEVATION SHEETS** FOR LOCATION OF CONTROL JOINTS. WHERE NOT NOTED, CONTROL JOINTS TO BE LOCATED AS PER THE REQUIREMENTS FOUND IN THE STRUCTURAL DOCUMENTS BUT ARE NOT TO EXCEED 30' OC. SEE THE STRUCTURAL DRAWINGS FOR REINFORCING AND OTHER DETAILS PERTAINING TO MASONRY WALLS. IF NOT OTHERWISE NOTED, LOCATE CONTROL JOINTS AT CORNER ABOVE DOORS, INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. CONSULT WITH ARCHITECT PRIOR TO INSTALLING PER DETAIL **C1/ A520**
4. SEE IBC 2021, CHAPTER 7 FOR FIRE RESISTIVE REQUIREMENTS ON NEW CONCRETE AND CONCRETE MASONRY UNIT WALLS.
   - CMU WALLS (IBC TABLE 721.1(2), ITEM 3)
   - CAST IN PLACE CONCRETE WALLS (IBC TABLE 722.2.1.1)
5. REFER TO DETAIL SHEET **A520** FOR TYPICAL WALL CONDITIONS ASSOCIATED WITH ALL AND MASONRY PARTITIONS.
6. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., MASONRY IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM.
7. **PROTECTION OF MASONRY:** DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK, EXCEPT WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO REMAIN ABOVE 65 DEG F AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS. (THIS IS TO PREVENT CONDENSATION FROM COVERED WALLS CAUSING A MOISTURE PROBLEM.) COVER PARTIALLY COMPLETED MASONRY EACH DAY THAT CONSTRUCTION IS NOT IN PROGRESS. WALLS ARE TO BE PROTECTED UNTIL THEY ARE PERMANENTLY PROTECTED BY THE ROOFING MEMBRANE OVER THE CAP PLATE. THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY PROTECTION IMMEDIATELY FOLLOWING THE TOPPING OUT OF EACH SECTION OF WALL BY INSTALLING WATERPROOF SHEETING OVER A CONTINUOUS CAP PLATE UNTIL THE ROOFING MEMBRANE IS INSTALLED. **A SOLID GROUTED TOP BOND BEAM SHALL NOT BE CONSIDERED ADEQUATE PROTECTION FOR THE WALL.**
8. IT IS ACCEPTABLE TO PLACE NON-INTEGRAL COLORED CMU IN PORTIONS OF WALLS INDICATED TO BE CONSTRUCTED OF INTEGRAL COLOR CMU IF THE DOCUMENTS SHOW THESE PORTIONS OF WALL PAINTED OR COVERED WITH TILE. STUD FURRING, ABOVE CEILINGS OR UNDER ROOFING MEMBRANE. IT IS NOT ACCEPTABLE TO UTILIZE NON INTEGRAL COLORED CMU BEHIND CABINETS, FURNISHINGS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CLIMBING WALLS AND LOCKERS.
9. AT ALL SPLIT FACE AND PAINTED CMU THE HORIZONTAL AND VERTICAL MORTAR JOINTS ARE TO BE CONCAVE. AT ALL HONED BLOCK THE HORIZONTAL MORTAR JOINT IS TO BE A WEATHERED JOINT AND ALL VERTICAL JOINTS ARE TO BE RAKED.
10. PROVIDE A 3/4" CHAMFER ALL INTERIOR EXPOSED VERTICAL MASONRY CORNERS FROM 8" AFF TO BOTTOM OF MASONRY LINTEL OR IF NO LINTEL EXISTS, STOP CHAMFER @ FIRST MASONRY JOINT BELOW CEILING. NOTE THAT THIS CHAMFER IS NOT TO BE PROVIDED AT CORNERS SHOWN IN THESE DOCUMENTS AS COVERED WITH WALL TILE. SEE DETAIL
11. **PROVIDE SPECIAL SHAPES**, SUCH AS "U" SHAPED CHANNEL FOR LINTELS OR HEADERS AND CAPPING UNITS FOR SASH AND OTHER SPECIAL CONDITIONS.
12. WHERE SPLIT FACE BLOCK IS SHOWN EXTENDING TO THE TOP OF A PARAPET, PROVIDE AN INTEGRAL COLOR SMOOTH FACE BLOCK AT THE TOP COURSE TO ALLOW THE CAP FLASHING TO FIT TIGHT AGAINST THE WALL.
13. CONTRACTOR TO COORDINATE AND PROVIDE SMOOTH MASONRY AT ALL FLASHING, REGLETS, GUTTERS, EDGES OF CEILING AND BASE AND OTHER ITEMS REQUIRING A SMOOTH FINISH THAT ARE HIDDEN.

A1 PLAN - LEVEL 01 - ANNOTATED C

SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - MAIN LEVEL



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STATE OF UTAH · JARED SHEFFIELD · 7067969 · LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

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5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 12 ENLARGED ANNOTATED PLAN - LEVEL 01

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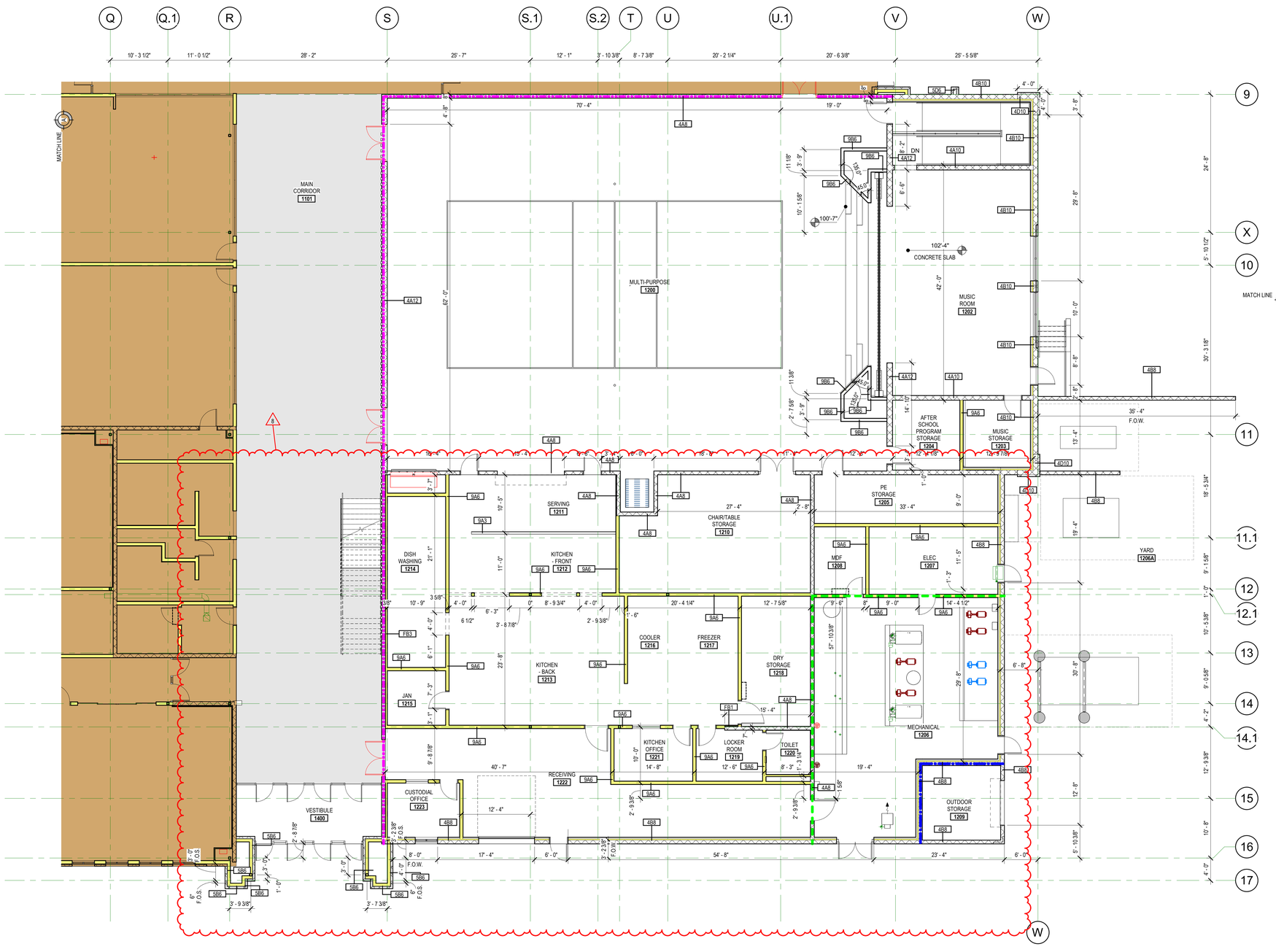


PLAN - LEVEL 01 - DIMENSION + WALL TYPE Copy 1

A1 Copy 1

SCALE: 1/8" = 1'-0"

NORTH

DIMENSION NOTES

1. ALL DIMENSIONS ARE TO CENTER OF STUD WALL OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. WHERE THE END OF A WALL IS INDICATED THE DIMENSION IS TO THE FINISH SURFACE OF THE WALL END.
2. UNLESS DIMENSIONED OTHERWISE, THE DIMENSION FROM THE BUCK OF A DOOR FRAME IS TO BE 4" TO THE WALL CORNER.
3. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN, DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED.
4. SMOKE AND FIRE RATED WALLS SHALL PERMANENTLY BE IDENTIFIED WITH SIGNS OR STENCILING IN THE CONCEALED SPACE. SUCH IDENTIFICATION SHALL BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8-INCH STROKE IN A CONTRASTING COLOR INCORPORATING THE WORDING, "FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS"

KEY FOR PARTITION TYPES

SEE SHEET A500 FOR WALL TYPE DETAILS AND NOTES

DENOTES TYPE OF CONSTRUCTION (SPEC. DIVISION) — WALL

4A8

- 3X 0 SERIES CONCRETE
- 4X 0 SERIES MASONRY
- 5X 0 SERIES COLD FORMED METAL STUDS, 16 GA MIN.
- 9X 0 SERIES METAL STUDS

NOMINAL SIZES: V = VARIABLE/MATCHEXISTING
1 = 1 5/8" STUDS
2 = 2 1/2" STUDS
3 = 3 5/8" STUDS
4 = 4" STUDS / 4" (NOM.) C.M.U.
6 = 6" STUDS / 6" (NOM.) C.M.U.
8 = 8" STUDS / 8" (NOM.) C.M.U.
10 = 10" (NOM.) C.M.U. OR CONC.
12 = 12" (NOM.) C.M.U. OR CONC.

EXAMPLE: WALL TYPE 9A3 IS A 3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD ON BOTH SIDES.

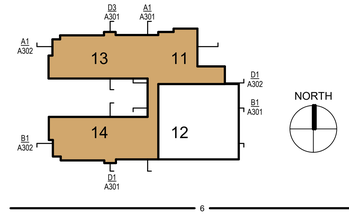
RATED WALL LEGEND

- INCIDENTAL USE AREAS
- 1 HOUR SEPARATION
- 2 HOUR SEPARATION
- 3 HOUR SEPARATION

EXAMPLE: WALL TYPE 9A3-1 IS A ONE HOUR RATED, 3 5/8" METAL STUD WALL WITH 5/8" GYPSUM BOARD ON BOTH SIDES, PER ASSEMBLY REQUIREMENTS.

90X-R SERIES — FIRE RATING (ONLY WHEN NOTED): 1 = 1 HOUR RATED ASSEMBLY
2 = 2 HOUR RATED ASSEMBLY
3 = 3 HOUR RATED ASSEMBLY

KEY PLAN - MAIN LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: DECEMBER 08, 2023

STATE OF UTAH — REGISTERED — 7067869 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 12 ENLARGED
DIMENSION + WALL TYPE
PLAN - LEVEL 01

A112.2

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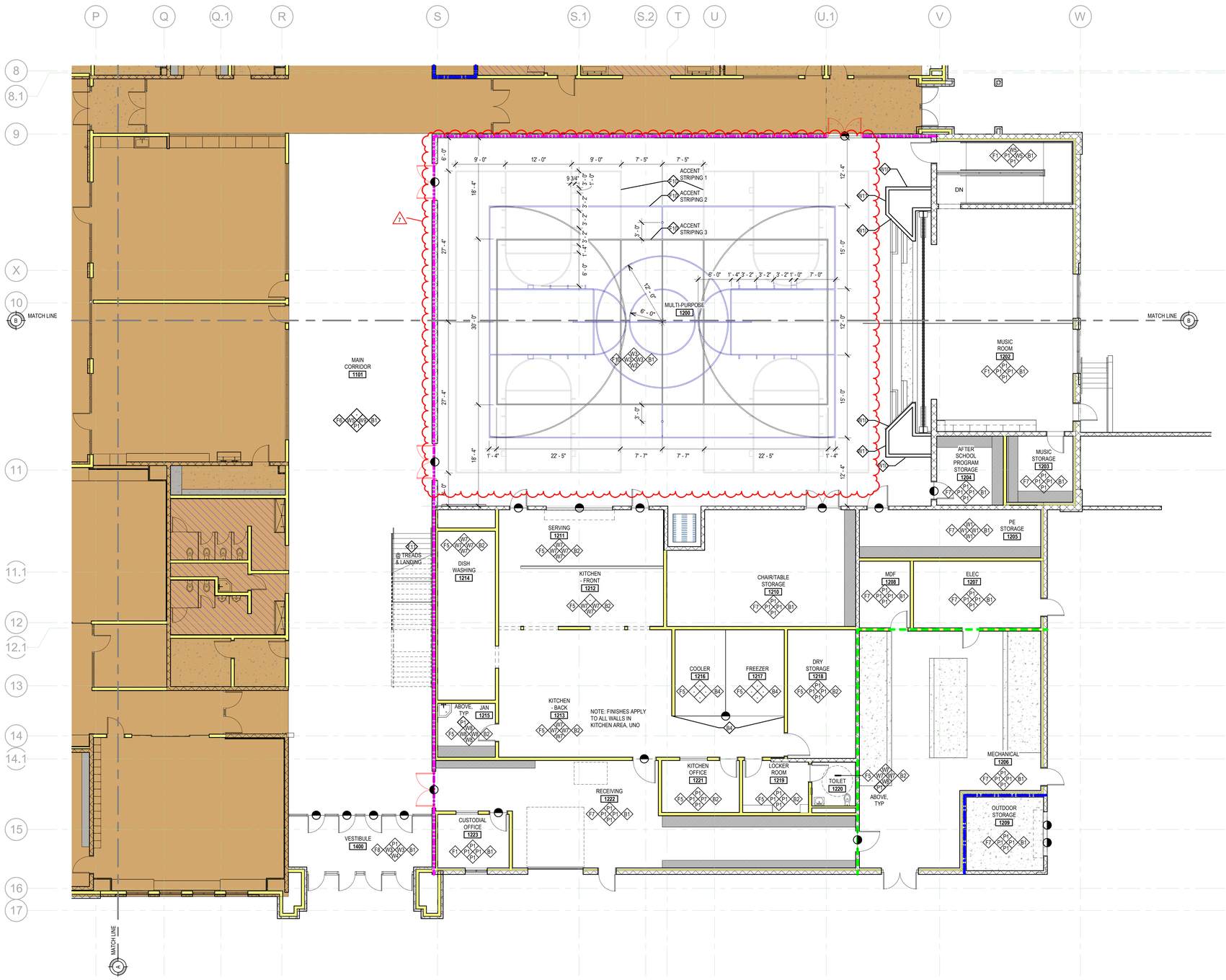
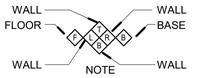


A1 AREA 12 FINISH PLAN

SCALE: 1/8" = 1'-0"

NORTH

FINISH PLAN SYMBOLS



SINGLE FINISH SYMBOLS INDICATE WHERE FINISHES ARE DIFFERENT FROM GENERAL ROOM FINISHES, OR PROVIDE ADDITIONAL FINISH INFORMATION

CHANGE AT FLOOR MATERIAL

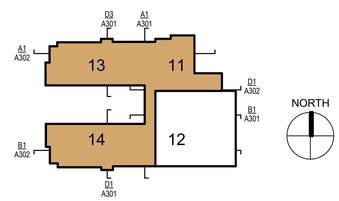
IN ANY SPACE WHERE FINISHES ARE NOT DESIGNATED, ASSUME THE FOLLOWING FINISHES:

B2 4" RUBBER BASE
F1 CARPET TILES - GENERAL FIELD - LAID IN LINEAR BRICK PATTERN
W1: PRIMED & PAINTED WALL - GENERAL COLOR - EPOXY PAINT IN WE/DAMP AREAS
W3: SEALED CMU WHERE CMU IS PRESENT

GENERAL FINISH NOTES

1. PROVIDE EPOXY PAINT AT ALL RESTROOMS, SHOWERS, LOCKER ROOMS AND JANITOR CLOSETS.
2. ALL PAINTED STEEL BRACING AND COLUMNS TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. AT SOFFITS RECEIVING COLOR - PAINT ALL SIDES OF SOFFIT.
4. ALL METAL GUARDRAILS AND STAIR STRINGERS TO BE PAINTED SEE FINISH SCHEDULE FOR H.M. DOOR AND FRAME PAINT COLORS.
5. ALL EXPOSED CEILINGS TO BE PAINTED. REFER TO REFLECTED CEILING PLANS.
6. ALL FLOOR TRANSITIONS TO BE LOCATED AT CENTER OF DOOR, U.N.O. ALL FLOOR TRANSITIONS AT FLOOR TILE (T1) LOCATIONS TO BE LOCATED AT INSIDE CORNER OF DOOR.
7. PROVIDE FLOOR FINISH 'RT': RUBBER STAIR TREAD' AT STAIR TREADS AND LANDING.
8. PROVIDE A SMOOTH TRANSITION AT ALL FLOOR MATERIALS - CONTRACTOR TO INSTALL ALL FLOOR FINISHES AT SAME LEVEL, DESPITE DIFFERENT THICKNESS. PROVIDE FLOOR TRANSITION WHERE OCCURS.
9. SEE SHEET AXXX FOR FLOORING TRANSITION DETAILS.
10. SEE ELEVATION SHEETS FOR ALL WALL TILE PATTERNS.
11. PROVIDE TILE 4"X4" CERAMIC WALL TILE AT ALL JANITOR SINKS UNLESS NOTED OTHERWISE. PROVIDE TILE BULLNOSE TO FINISH OFF ALL EXPOSED EDGES.
12. ALL WALLS RECEIVING TILE WAINSCOT TO RECEIVE PAINT P1 ABOVE, U.N.O. SEE FINISH PLANS FOR ACCENT WALL LOCATIONS.
13. ALL GROUT JOINTS TO BE NO LARGER THAN 1/8".
14. PROVIDE 'CG: CORNER GUARD' AT ALL LOCATIONS WHERE TILE WAINSCOT WRAPS GYP. BD. CORNERS. CAP ALL TILE WAINSCOT WITH SCHLUTER STRIP (SL).
15. AT ALL TILE WAINSCOT, SCRIBE BOTTOM TILE TO MATCH FINISH FLOOR SURFACE AND CAULK WITH BASE 'NB'.
16. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF MILLWORK.
17. COORDINATE ALL MILLWORK WITH APPLIANCES BEFORE FABRICATION.
18. ALL COUNTERTOP, BACKSPLASHES, AND EDGE BANDING TO HAVE COORDINATING FINISHES.
19. ALL WOOD TRIM TO BE STAINED TO MATCH DOOR STAIN.

KEY PLAN - MAIN LEVEL



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BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 12 ENLARGED FINISH PLAN - LEVEL 01

A112.3

11/27/2023 12:44:04 PM

HEADER SCHEDULE

H1	GYP. HEADER
H2	MASONRY HEADER

GENERAL CEILING NOTES

1. REFER TO DETAIL **C6/A530** FOR TYPICAL CEILING SUSPENSION & SEISMIC BRACING
2. REFER TO DETAIL **A6/A530** FOR TYPICAL SUSPENDED GYP. BOARD CEILINGS
3. ALL UNIDENTIFIED CEILING TYPES ON THE PLANS SHALL BE TYPE " A" AT 9'-4" A.F.F.
4. GRID SUSPENSION SYSTEMS SHALL BE CENTERED WITHIN AREAS INDICATED, UNLESS NOTED OTHERWISE
5. PAINT ALL EXPOSED STRUCTURE, MECHANICAL, DUCTS, ELECTRICAL WORK, PIPING, ETC. ALL VISIBLE ELEMENTS TO BE PAINTED AT TYPE "E" & TYPE "F" (ABOVE VENTWOOD)
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF MECHANICAL GRILLES, AND TO MECHANICAL DRAWINGS FOR QUANTITIES AND TYPES
7. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF LIGHT FIXTURES AND TO ELECTRICAL DRAWINGS FOR QUANTITY AND TYPES
8. MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE WORK WITH SPRINKLER CONTRACTOR TO AVOID CONFLICTS IN FIELD
9. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
10. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED.
11. HEADER HEIGHTS TO BE 9'-0" UNO.
12. CEILING TILE SHALL BE LISTED & TESTED ASTM E 84 & HAVE A FLAME SPREAD OF 0-25 & A SMOKE INDEX OF 0-450. IF THE CEIING TILE IS A COMPONENT PART OF A PLENUM SYSTEM THEN IT SHALL BE LISTED & TESTED PER ASTM E 84 & HAVE A FLAME SPREAD F 0-25 & A SMOKE INDEX OF 0-50.

CEILING LEGEND

- A - SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
- B - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING
- C - SUSPENDED 5/8" GYP. BD. CEILING SYSTEM - PAINTED (EPOXY PAINT AT WET LOCATIONS)
- D - SUSPENDED 5/8" GYP. CEILING SYSTEM (2 LAYERS) , PAINTED - 1 HOUR RATED
- E - OPEN TO STRUCTURE ABOVE
- F - SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH HOLD DOWN CLIPS
- G - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING (VINYL COATED)
- H - SUSPENDED WOOD PANEL CEILING SYSTEM
- I - EXTERIOR METAL SOFFIT SYSTEM. APPLY 3" CLOSED CELL SPRAY FOAM INSULATION ON UNDERSIDE OF DECK, WHERE OCCURS.
- J - SPRAY APPLIED ACOUSTICAL TREATMENT ON METAL DECK, WHITE - PAINT ALL BUILDING STRUCTURE, OVERHEAD MEP, ETC TO MATCH INSULATION COLOR

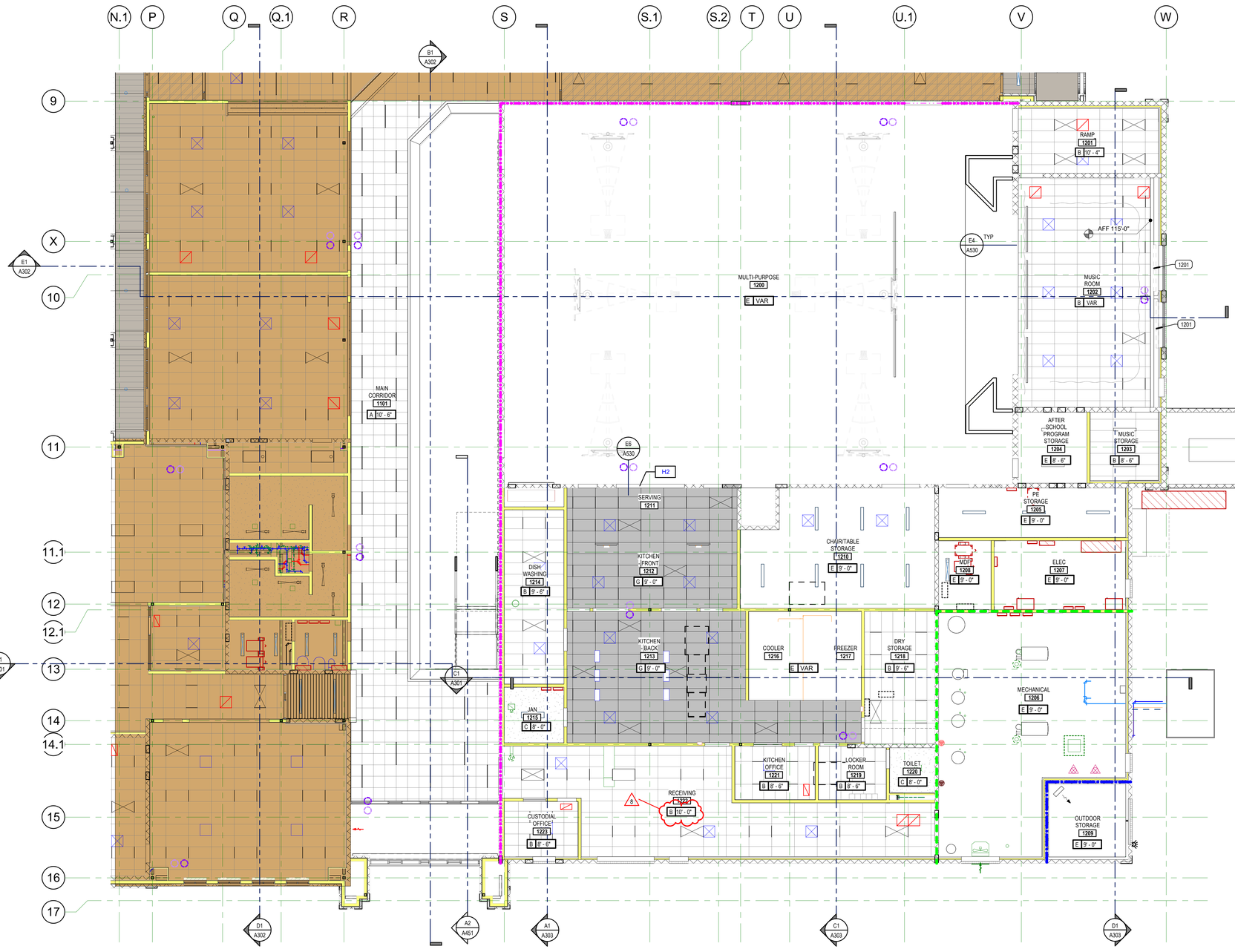
CEILING SYMBOLS

ELECTRICAL

- 2'X4' FLUORESCENT FIXTURE
- 2'X2' FLUORESCENT FIXTURE
- 1'X4' FLUORESCENT FIXTURE
- FLUORESCENT STRIP FIXTURE
- RECESSED DOWN LIGHT
- WALL WASH
- 1'X4' FLUORESCENT FIXTURE
- PENDANT LIGHT FIXTURE
- EXIT SIGN, SINGLE-SIDED
- EXIT SIGN, DOUBLE-SIDED
- FIRE ALARM
- SPEAKER
- SMOKE DETECTOR
- WIRELESS INTERNET

MECHANICAL

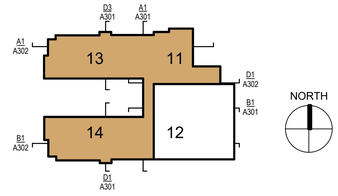
- SUPPLY GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- SPRINKLER HEAD - CEILING MOUNT
- SPRINKLER HEAD - WALL MOUNT



KEYED NOTES

1201 MOTORIZED ROLLER WINDOW SHADES

KEY PLAN - MAIN LEVEL



A1 PLAN - LEVEL 01 - RCP C

SCALE: 1/8" = 1'-0"

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STATE OF UTAH — BRENT C. BROWN — 7067966 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 12 ENLARGED REFLECTED CEILING PLAN - LEVEL 01

A112.4

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KEYED NOTES

500.1	STEEL TUBE SWING SUPPORT, ATTACHED TO STRUCTURE ABOVE, PROVIDE CEILING TRIM KIT WHERE IT PENETRATES CEILING SYSTEM. PAINTED WHERE EXPOSED
508	STEEL COLUMN PAINTED WHERE EXPOSED
611	16" ADJUSTABLE SHELVING, U.N.O.
619	24" ADJUSTABLE SHELVING, U.N.O.
816	14" ALUMINUM SLIDING GLASS DOOR
1004	SOAP DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1010	TOILET PAPER DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1026.1	SS MAGNETIC STRIP, 1 1/2
1031	SURFACE MOUNTED PAPER TOWEL DISPENSER. OWNER FURNISHED, CONTRACTOR INSTALLED
1032.1	WALL MOUNTED CHANGING TABLE
1032.2	75.25" X 31" WALL MOUNTED ADJUSTABLE CHANGING TABLE, MOTORIZED

KEYED NOTES

1039	48"X60" WHITE BOARD
1040	72"X60" WHITE BOARD
1041	96"X60" WHITE BOARD
1127	WASHER
1128	DRYER
1210	MOBILE COMPUTER CART, NIC
2200	SINK AND FAUCET
2205	DRINKING FOUNTAINS HIGH/LOW, W/ BOTTLE FILLER OVER LOWER FOUNTAIN
2206	HOSE BIB/ WALL HYDRANT
2299	BUBBLER
2304	RETURN AIR CHASE AND MECHANICAL GRILLE W/ MTL. STUD FRAMING & GYP. BD SURROUND, SEE PLANS & JUNT. ELEVATIONS. PAINT INSIDE OF CHASE WALLS BLACK
2702.1	WALL MOUNTED TV/MONITOR OWNER PROVIDED CONTRACTOR INSTALLED

PLAN NOTES

1. WHERE FLOOR DRAINS ARE INSTALLED THE FLOOR IS TO SLOPE TO THE DRAIN. THE MAXIMUM SLOPE IS NOT TO EXCEED 2% WHILE THE MINIMUM SLOPE IS NOT TO BE LESS THAN 1%.
2. WHERE CONCRETE PADS ARE CALLED TO BE CONSTRUCTED UNDER EQUIPMENT THE SLAB IS TO BE 8" THICK, U.N.O., AND IS TO HAVE #4 BARS AT 18" O.C. EACH WAY. COORDINATE DIMENSIONS OF PAD WITH ACTUAL EQUIPMENT SPEC.
3. ALL MECHANICAL ROOMS TO RECEIVE A CONCRETE CURB AROUND INSIDE PERIMETER WALLS. SEE SHEET A573 FOR CURB DETAILS
4. SEE SHEET **A573** AND **A574** FOR TYPICAL FLOORING TRANSITION DETAILS.
5. THE CONTRACTOR IS TO ENSURE THAT BETWEEN ANY FINISH FLOOR ELEVATION TO 36" A.F.F. ALL GUARDRAILS ARE TO BE CONSTRUCTED AND INSTALLED SO THAT A 4 3/8" SPHERE WILL NOT PASS BETWEEN ANY TWO ADJACENT GUARDRAIL COMPONENTS OR BETWEEN THE EDGE OF A GUARDRAIL AND ALL ADJACENT BUILDING ELEMENT SUCH AS A WALL OR FLOOR. AN 4 3/8" DIAMETER SPHERE IS NOT TO PASS BETWEEN THE ABOVE MENTIONED COMPONENTS AND ELEMENTS FROM AN ELEVATION 36" A.F.F. AND HIGHER.
6. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

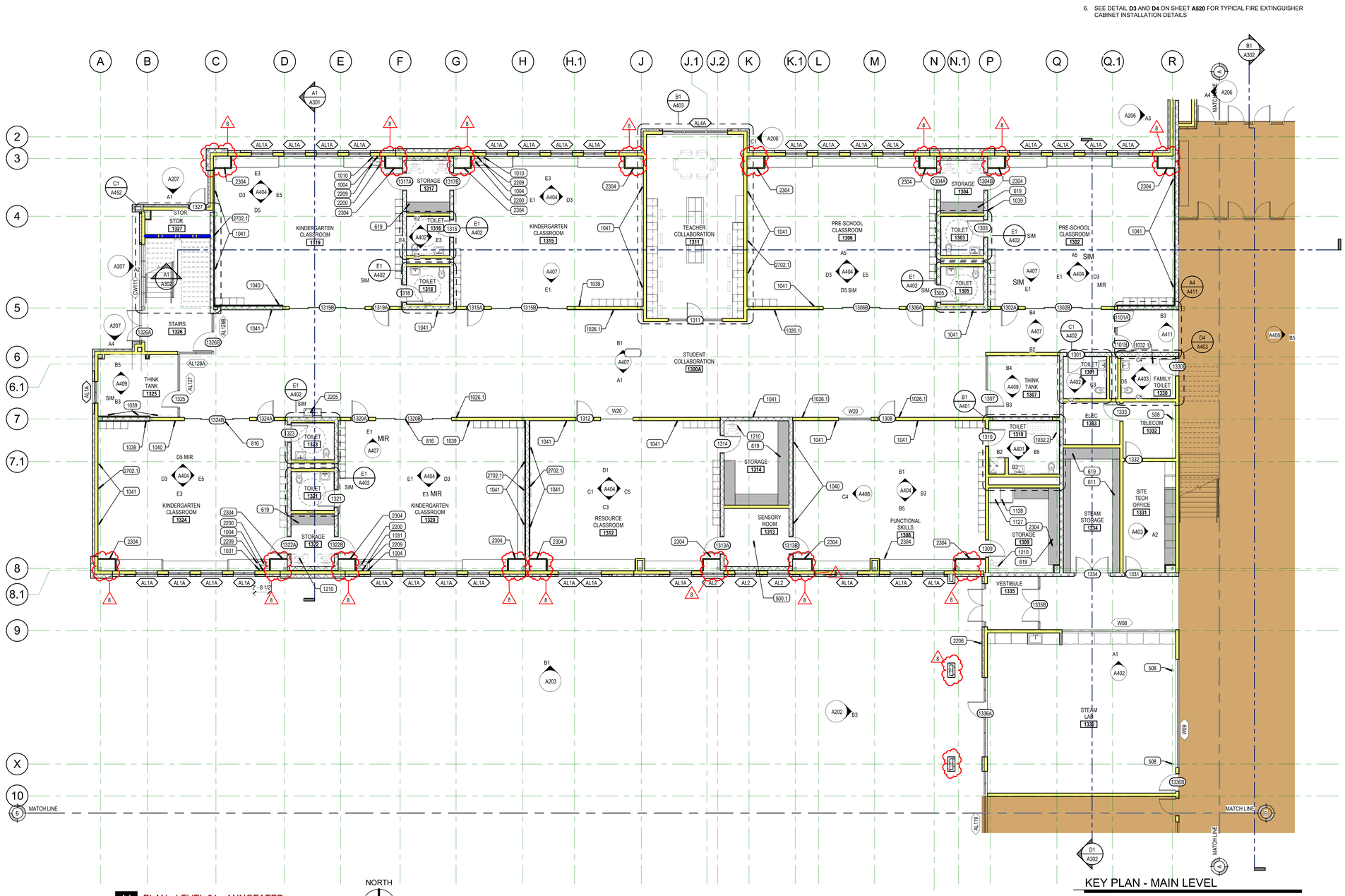
PARTITION + FRAMING GENERAL NOTES

FRAMED WALL PARTITIONS

1. PARTITION TYPE INDICATIONS ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH SHEETS AND INTERIOR ELEVATIONS FOR WALL FINISHES INCLUDING TILE COURSING AND LAYOUT AND/OR THE DESIGNATIONS ON THE PLANS FOR ADDITIONAL INFORMATION REGARDING APPLIED FINISHES.
2. WHERE PARTITION TYPE DESIGNATION ON FLOOR PLANS IS INTERRUPTED BY DOOR OPENING, GLAZED PARTITION, ETC., CONSTRUCTION ABOVE INTERRUPTION (AND WHERE APPLICABLE BELOW) IS TO BE THE SAME AS THAT DESIGNATED FOR THE PARTITION IN WHICH THE INTERRUPTION OCCURRED.
3. THE MINIMUM REQUIREMENTS FOR CONSTRUCTION OF EACH PARTITION TYPE AS EXPRESSED BY THE INDICATED REFERENCE ARE INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THE WORK OF THIS PROJECT. HOWEVER, ADDITIONAL AND/OR MORE RESTRICTIVE REQUIREMENTS MAY BE INDICATED BY THE SPECIFICATIONS AND DRAWINGS. SUCH REQUIREMENTS ALSO APPLY AND SHALL GOVERN. SUCH REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   a. USE 5/8" THICK GYPSUM BOARD THROUGHOUT UNLESS NOTED OTHERWISE.
   b. USE 16" OC MAX STUD SPACING UNLESS NOTED OTHERWISE IN THESE DOCUMENTS. THE SPACING STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MAX SPACING IF ALLOWED IN THESE DOCUMENTS.
   c. USE STUDS OF GAUGE INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. THE GAUGE STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM GAUGE TESTED, 20 GA (30 MILS) IS THE MINIMUM ALLOWED IN THESE DOCUMENTS.
4. USE STUDS OF DEPTH INDICATED BY THIS SET OF DOCUMENTS. THE DEPTH STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM DEPTH TESTED DEPTH ALLOWED IN THESE DOCUMENTS. SEE STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CONSTRUCTION OF CONCRETE, MASONRY AND STUD WALLS
5. PROVIDE FIRE RATED CONSTRUCTION ASSEMBLIES WHERE INDICATED ON SHEETS G100's AND FLOOR PLAN DRAWINGS.
6. ALL DIMENSIONS ARE CENTER OF STUD OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. FACE OF STUD WILL BE NOTED AS FOS AND FACE OF FINISHED WALL WILL BE NOTED AS FOW.
7. AT ALL INTERIOR WALLS, STUDS, INSULATION AND GYPSUM BOARD ARE TO EXTEND TO THE DECK ABOVE. UNLESS NOTED OTHERWISE.
8. WALL TYPES NOT NOTED ARE ASSUMED TO MATCH ADJACENT ROOMS. SEE SHEETS FOR FINISHES, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. ALL METAL STUD PARTITIONS ARE CONSIDERED ACOUSTIC PARTITIONS AND ARE TO RECEIVE A TYPE 1 SOUND ATTENUATION BLANKET. THICKNESS TO MATCH STUD DEPTH, UNLESS NOTED OTHERWISE.
10. REFER TO SHEET **A520** FOR TYPICAL INTERIOR WALL CONDITIONS ASSOCIATED WITH ALL METAL STUD PARTITIONS.
11. PROVIDE CONTROL JOINTS IN METAL FRAMED WALLS AT APPROXIMATELY 30 FEET ON CENTER. LOCATE AT CORNER ABOVE DOORS OR INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. **CONSULT WITH ARCHITECT PRIOR TO COMMENCING FRAMING.** INSTALL PER DETAILS **C2 AND C3/ A520** FOR CONTROL JOINTS.
12. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., GYPSUM BOARD IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM. THE OPENING FOR DUCTS OR LARGE PENETRATIONS SHALL BE FRAMED WITH A HEADER, ADD AN ANGLED CORNER BRACE IF THE GAP EXCEEDS 3" FROM FRAMING TO THE OPENING.
13. PROVIDE BLOCKING / BACKING FOR ALL WALL MOUNTED EQUIPMENT. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR CABINETS, GRAB BARS ETC. INSTALL BLOCKING AS DETAILED OR AS REQUIRED TO MOUNT SUCH DEVICES. ALL BLOCKING IS TO BE FIRE RETARDANT TREATED. INSTALL PER SHEET **A520**
14. **WHERE THERE IS LIMITED WATER EXPOSURE:** INSTALL ONE LAYER OF 5/8" TYPE X WATER RESISTANT GYPSUM BOARD PER ASTM C1396 (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION AT THE FOLLOWING LOCATIONS.
   a. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITORS SINKS
   b. AT OTHER LOCATIONS, I.E. TOILET ROOMS AND KITCHENS, AND AS INDICATED ON THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
15. INSTALL ONE LAYER OF 5/8" GLASS MAT TILE BACKER BOARD IN LIEU OF GYPSUM BOARD (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION WHERE THERE IS NO FIRE RATING AND OVER GYPSUM BOARD FACE LAYER AT FIRE RATED PARTITIONS AT THE FOLLOWING LOCATIONS.
16. AT WET LOCATIONS, SUCH AS SHOWER STALLS AND TUB SURROUNDS.
   a. WHERE CERAMIC TILE FINISHES ARE INDICATED PER THE FINISH PLANS AND/OR INTERIOR ELEVATIONS.
   b. AT OTHER LOCATIONS AS INDICATED BY THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
17. WHERE NEW WALLS OR FURRING ARE INDICATED TO BE DIMENSIONED OFF OF AN EXISTING WALL, THE NEW WALL SHALL BE STRAIGHT AND PLUMB REGARDLESS OF THE CONDITION OF THE EXISTING WALL.
18. ALL EXTERIOR STUD WALLS TO HAVE CONTINUOUS INSULATION, VAPOR BARRIER AND AIR INFILTRATION BARRIER FOR THE FULL HEIGHT AND LENGTH OF THE WALL.SEAL ALL PENETRATIONS. SEE DETAILS ON SHEET **A520** FOR TYPICAL TOP OF WALL CONDITION
19. THE AIR INFILTRATION BARRIER IS TO WRAP INTO ALL WINDOW AND DOOR OPENINGS.
20. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

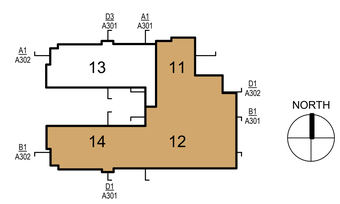
MASONRY OR CONCRETE WALLS

1. SEE STRUCTURAL PLANS FOR ADDITIONAL CONCRETE AND MASONRY WALL INFORMATION.
2. SEE EXTERIOR ELEVATIONS FOR COURSING, MASONRY TYPES AND METAL PANEL ORIENTATION PER **EXTERIOR ELEVATION SHEETS.**
3. ALL MASONRY WALLS ARE TO BE REINFORCED AND ARE TO BE SET ON REINFORCED FOOTINGS. SEE THE **EXTERIOR ELEVATION SHEETS** FOR LOCATION OF CONTROL JOINTS. WHERE NOT NOTED, CONTROL JOINTS TO BE LOCATED AS PER THE REQUIREMENTS FOUND IN THE STRUCTURAL DOCUMENTS BUT ARE NOT TO EXCEED 30' OC. SEE THE STRUCTURAL DRAWINGS FOR REINFORCING AND OTHER DETAILS PERTAINING TO MASONRY WALLS. IF NOT OTHERWISE NOTED, LOCATE CONTROL JOINTS AT CORNER ABOVE DOORS, INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. CONSULT WITH ARCHITECT PRIOR TO INSTALLING PER DETAIL **C1/ A520**
4. SEE IBC 2021, CHAPTER 7 FOR FIRE RESISTIVE REQUIREMENTS ON NEW CONCRETE AND CONCRETE MASONRY UNIT WALLS.
   - CMU WALLS (IBC TABLE 721.1(2), ITEM 3)
   - CAST IN PLACE CONCRETE WALLS (IBC TABLE 722.2.1.1)
5. REFER TO DETAIL SHEET **A520** FOR TYPICAL WALL CONDITIONS ASSOCIATED WITH ALL AND MASONRY PARTITIONS.
6. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., MASONRY IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM.
7. **PROTECTION OF MASONRY:** DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK. EXCEPT WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO REMAIN ABOVE 65 DEG F AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS. (THIS IS TO PREVENT CONDENSATION FROM COVERED WALLS CAUSING A MOISTURE PROBLEM.) COVER PARTIALLY COMPLETED MASONRY EACH DAY THAT CONSTRUCTION IS NOT IN PROGRESS. WALLS ARE TO BE PROTECTED UNTIL THEY ARE PERMANENTLY PROTECTED BY THE ROOFING MEMBRANE OVER THE CAP PLATE. THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY PROTECTION IMMEDIATELY FOLLOWING THE TOPPING OUT OF EACH SECTION OF WALL BY INSTALLING WATERPROOF SHEETING OVER A CONTINUOUS CAP PLATE UNTIL THE ROOFING MEMBRANE IS INSTALLED. **A SOLID GROUTED TOP BOND BEAM SHALL NOT BE CONSIDERED ADEQUATE PROTECTION FOR THE WALL.**
8. IT IS ACCEPTABLE TO PLACE NON-INTEGRAL COLORED CMU IN PORTIONS OF WALLS INDICATED TO BE CONSTRUCTED OF INTEGRAL COLOR CMU IF THE DOCUMENTS SHOW THESE PORTIONS OF WALL PAINTED OR COVERED WITH TILE, STUD FURRING, ABOVE CEILINGS OR UNDER ROOFING MEMBRANE. IT IS NOT ACCEPTABLE TO UTILIZE NON INTEGRAL COLORED CMU BEHIND CABINETS, FURNISHINGS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CLIMBING WALLS AND LOCKERS.
9. AT ALL SPLIT FACE AND PAINTED CMU THE HORIZONTAL AND VERTICAL MORTAR JOINTS ARE TO BE CONCAVE. AT ALL HONED BLOCK THE HORIZONTAL MORTAR JOINT IS TO BE A WEATHERED JOINT AND ALL VERTICAL JOINTS ARE TO BE RAKED.
10. PROVIDE A 3/4" CHAMFER ALL INTERIOR EXPOSED VERTICAL MASONRY CORNERS FROM 8" AFF TO BOTTOM OF MASONRY LINTEL OR IF NO LINTEL EXISTS, STOP CHAMFER @ FIRST MASONRY JOINT BELOW CEILING. NOTE THAT THIS CHAMFER IS NOT TO BE PROVIDED AT CORNERS SHOWN IN THESE DOCUMENTS AS COVERED WITH WALL TILE. SEE DETAIL
11. **PROVIDE SPECIAL SHAPES**, SUCH AS "U" SHAPED CHANNEL FOR LINTELS OR HEADERS AND CAPPING UNITS FOR SASH AND OTHER SPECIAL CONDITIONS.
12. WHERE SPLIT FACE BLOCK IS SHOWN EXTENDING TO THE TOP OF A PARAPET, PROVIDE AN INTEGRAL COLOR SMOOTH FACE BLOCK AT THE TOP COURSE TO ALLOW THE CAP FLASHING TO FIT TIGHT AGAINST THE WALL.
13. CONTRACTOR TO COORDINATE AND PROVIDE SMOOTH MASONRY AT ALL FLASHING, REGLETS, GUTTERS, EDGES OF CEILING AND BASE AND OTHER ITEMS REQUIRING A SMOOTH FINISH THAT ARE HIDDEN.



A1 PLAN - LEVEL 01 - ANNOTATED
SCALE: 1/8" = 1'-0"

NORTH



KEY PLAN - MAIN LEVEL

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STATE OF UTAH — REGISTERED — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 13 ENLARGED ANNOTATED PLAN - LEVEL 01

A113.1

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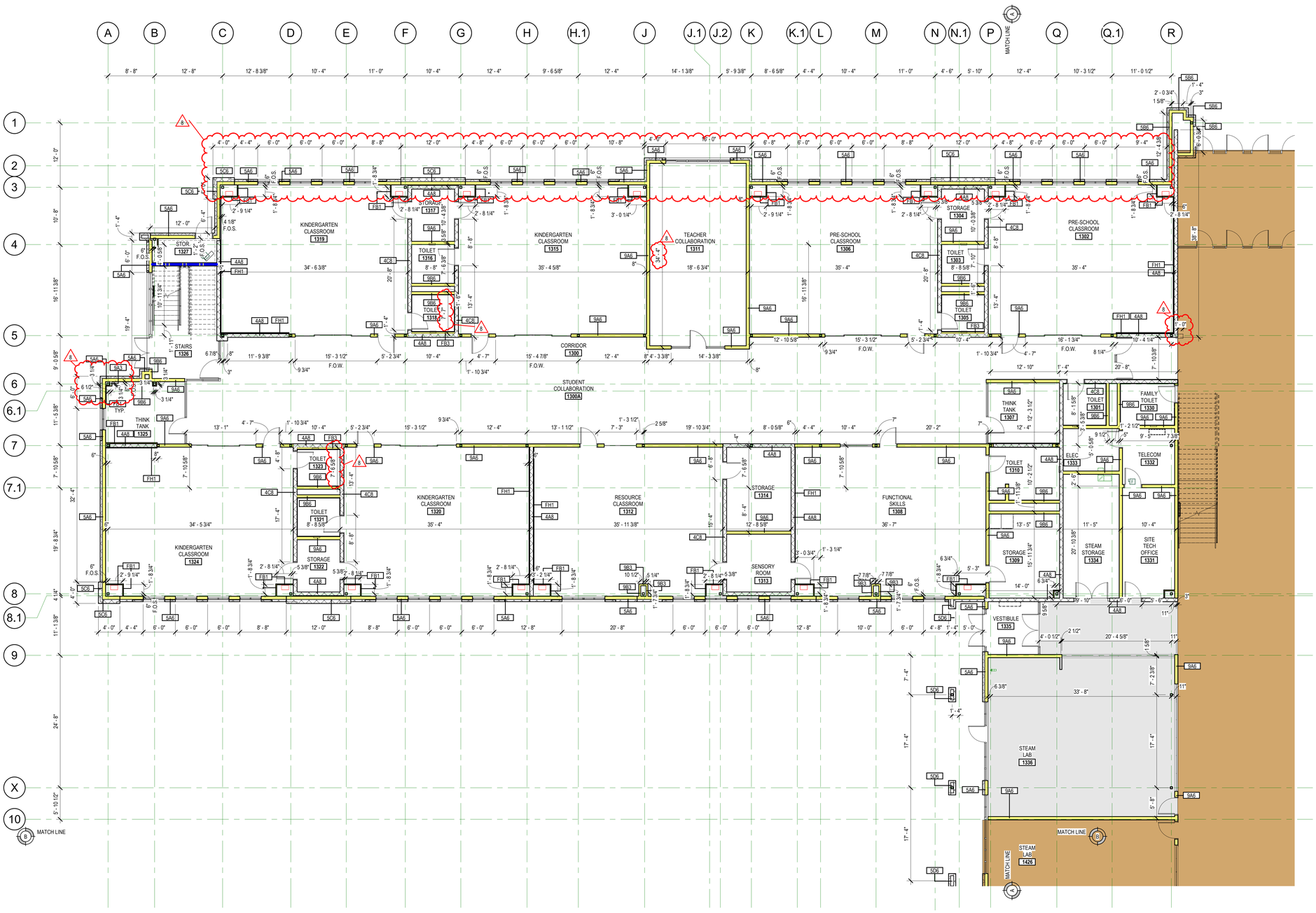
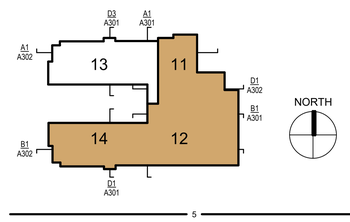


A1 PLAN - LEVEL 01 - DIMENSION + WALL TYPE

SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - MAIN LEVEL



DIMENSION NOTES

1. ALL DIMENSIONS ARE TO CENTER OF STUD WALL OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. WHERE THE END OF A WALL IS INDICATED THE DIMENSION IS TO THE FINISH SURFACE OF THE WALL END.
2. UNLESS DIMENSIONED OTHERWISE, THE DIMENSION FROM THE BUCK OF A DOOR FRAME IS TO BE 4" TO THE WALL CORNER.
3. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN, DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED.
4. SMOKE AND FIRE RATED WALLS SHALL PERMANENTLY BE IDENTIFIED WITH SIGNS OR STENCILING IN THE CONCEALED SPACE. SUCH IDENTIFICATION SHALL BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8-INCH STROKE IN A CONTRASTING COLOR INCORPORATING THE WORDING, "FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS"

KEY FOR PARTITION TYPES

SEE SHEET A500 FOR WALL TYPE DETAILS AND NOTES

DENOTES TYPE OF CONSTRUCTION (SPEC. DIVISION) — WALL

4A8

3X 0 SERIES CONCRETE
4X 0 SERIES MASONRY
5X 0 SERIES COLD FORMED METAL STUDS, 16 GA MIN.
9X 0 SERIES METAL STUDS

NOMINAL SIZES: V = VARIABLE/MATCHEXISTING
1 = 1 5/8" STUDS
2 = 2 1/2" STUDS
3 = 3 5/8" STUDS
4 = 4" STUDS / 4" (NOM.) C.M.U.
6 = 6" STUDS / 6" (NOM.) C.M.U.
8 = 8" STUDS / 8" (NOM.) C.M.U.
10 = 10" (NOM.) C.M.U. OR CONC.
12 = 12" (NOM.) C.M.U. OR CONC.

EXAMPLE: WALL TYPE 9A3 IS A 3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD ON BOTH SIDES.

RATED WALL LEGEND

- INCIDENTAL USE AREAS
- 1 HOUR SEPARATION
- 2 HOUR SEPARATION
- 3 HOUR SEPARATION

EXAMPLE: WALL TYPE 9A3-1 IS A ONE HOUR RATED, 3 5/8" METAL STUD WALL WITH 5/8" GYPSUM BOARD ON BOTH SIDES, PER ASSEMBLY REQUIREMENTS.

90X-R SERIES
FIRE RATING (ONLY WHEN NOTED): 1 = 1 HOUR RATED ASSEMBLY
2 = 2 HOUR RATED ASSEMBLY
3 = 3 HOUR RATED ASSEMBLY

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STATE OF UTAH — 7067969 — LICENSED ARCHITECT

REV	DATE	DESCRIPTION
7	11/27/2023	BPS-ADDENDUM 03
8	12/04/2023	ASI-03

OGDEN SCHOOL DISTRICT

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130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 13 ENLARGED
DIMENSION + WALL TYPE
PLAN - LEVEL 01

A113.2

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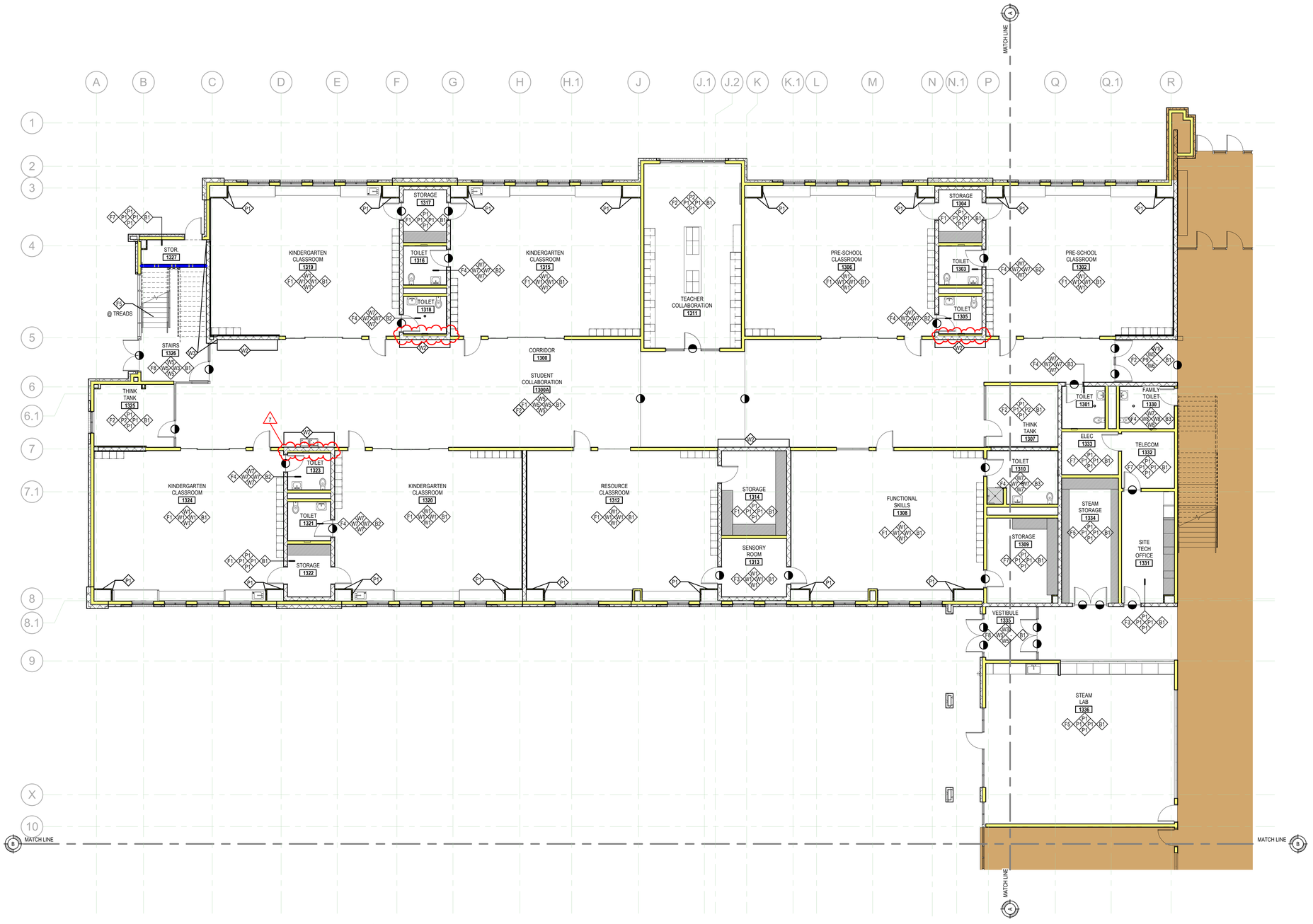
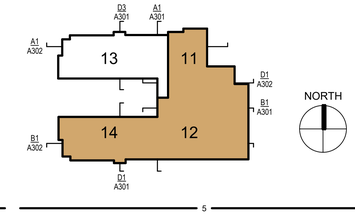


A1 AREA 13 FINISH PLAN

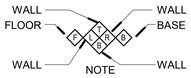
SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - MAIN LEVEL



FINISH PLAN SYMBOLS



SINGLE FINISH SYMBOLS INDICATE WHERE FINISHES ARE DIFFERENT FROM GENERAL ROOM FINISHES, OR PROVIDE ADDITIONAL FINISH INFORMATION

CHANGE AT FLOOR MATERIAL

IN ANY SPACE WHERE FINISHES ARE NOT DESIGNATED, ASSUME THE FOLLOWING FINISHES:

B2 4" RUBBER BASE
F1 CARPET TILES - GENERAL FIELD - LAID IN LINEAR BRICK PATTERN
W1: PRIMED & PAINTED WALL - GENERAL COLOR - EPOXY PAINT IN WE/DAMP AREAS
W3: SEALED CMU WHERE CMU IS PRESENT

GENERAL FINISH NOTES

1. PROVIDE EPOXY PAINT AT ALL RESTROOMS, SHOWERS, LOCKER ROOMS AND JANITOR CLOSETS.
2. ALL PAINTED STEEL BRACING AND COLUMNS TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. AT SOFFITS RECEIVING COLOR - PAINT ALL SIDES OF SOFFIT.
4. ALL METAL GUARDRAILS AND STAIR STRINGERS TO BE PAINTED SEE FINISH SCHEDULE FOR H.M. DOOR AND FRAME PAINT COLORS.
5. ALL EXPOSED CEILINGS TO BE PAINTED. REFER TO REFLECTED CEILING PLANS.
6. ALL FLOOR TRANSITIONS TO BE LOCATED AT CENTER OF DOOR, U.N.O. ALL FLOOR TRANSITIONS AT FLOOR TILE (T1) LOCATIONS TO BE LOCATED AT INSIDE CORNER OF DOOR.
7. PROVIDE FLOOR FINISH 'RT': RUBBER STAIR TREAD' AT STAIR TREADS AND LANDING.
8. PROVIDE A SMOOTH TRANSITION AT ALL FLOOR MATERIALS - CONTRACTOR TO INSTALL ALL FLOOR FINISHES AT SAME LEVEL, DESPITE DIFFERENT THICKNESS. PROVIDE FLOOR TRANSITION WHERE OCCURS.
9. SEE SHEET AXXX FOR FLOORING TRANSITION DETAILS.
10. SEE ELEVATION SHEETS FOR ALL WALL TILE PATTERNS.
11. PROVIDE TILE 4"X4" CERAMIC WALL TILE AT ALL JANITOR SINKS UNLESS NOTED OTHERWISE. PROVIDE TILE BULLNOSE TO FINISH OFF ALL EXPOSED EDGES.
12. ALL WALLS RECEIVING TILE WAINSCOT TO RECEIVE PAINT P1 ABOVE, U.N.O. SEE FINISH PLANS FOR ACCENT WALL LOCATIONS.
13. ALL GROUT JOINTS TO BE NO LARGER THAN 1/8".
14. PROVIDE 'CG: CORNER GUARD' AT ALL LOCATIONS WHERE TILE WAINSCOT WRAPS GYP. BD. CORNERS. CAP ALL TILE WAINSCOT WITH SCHLUTER STRIP (SL).
15. AT ALL TILE WAINSCOT, SCRIBE BOTTOM TILE TO MATCH FINISH FLOOR SURFACE AND CAULK WITH BASE 'RB'.
16. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF MILLWORK.
17. COORDINATE ALL MILLWORK WITH APPLIANCES BEFORE FABRICATION.
18. ALL COUNTERTOP, BACKSPLASHES, AND EDGE BANDING TO HAVE COORDINATING FINISHES.
19. ALL WOOD TRIM TO BE STAINED TO MATCH DOOR STAIN.

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DATE: NOVEMBER 27 2023

STATE OF UTAH
BRENT H. SHEFFIELD
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 13 ENLARGED FINISH PLAN - LEVEL 01

A113.3

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HEADER SCHEDULE

H1	GYP. HEADER
H2	MASONRY HEADER

GENERAL CEILING NOTES

1. REFER TO DETAIL **C6/A530** FOR TYPICAL CEILING SUSPENSION & SEISMIC BRACING
2. REFER TO DETAIL **A6/A530** FOR TYPICAL SUSPENDED GYP. BOARD CEILINGS
3. ALL UNIDENTIFIED CEILING TYPES ON THE PLANS SHALL BE TYPE " A" AT 9'-4" A.F.F.
4. GRID SUSPENSION SYSTEMS SHALL BE CENTERED WITHIN AREAS INDICATED, UNLESS NOTED OTHERWISE
5. PAINT ALL EXPOSED STRUCTURE, MECHANICAL, DUCTS, ELECTRICAL WORK, PIPING, ETC. ALL VISIBLE ELEMENTS TO BE PAINTED AT TYPE "E" & TYPE "F" (ABOVE VENTWOOD)
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF MECHANICAL GRILLES, AND TO MECHANICAL DRAWINGS FOR QUANTITIES AND TYPES
7. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF LIGHT FIXTURES AND TO ELECTRICAL DRAWINGS FOR QUANTITY AND TYPES
8. MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE WORK WITH SPRINKLER CONTRACTOR TO AVOID CONFLICTS IN FIELD
9. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
10. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED.
11. HEADER HEIGHTS TO BE 9'-0" UNO.
12. CEILING TILE SHALL BE LISTED & TESTED ASTM E 84 & HAVE A FLAME SPREAD OF 0-25 & A SMOKE INDEX OF 0-450. IF THE CEIING TILE IS A COMPONENT PART OF A PLENUM SYSTEM THEN IT SHALL BE LISTED & TESTED PER ASTM E 84 & HAVE A FLAME SPREAD F 0-25 & A SMOKE INDEX OF 0-50.

CEILING LEGEND

- A - SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
- B - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING
- C - SUSPENDED 5/8" GYP. BD. CEILING SYSTEM - PAINTED (EPOXY PAINT AT WET LOCATIONS)
- D - SUSPENDED 5/8" GYP. CEILING SYSTEM (2 LAYERS) , PAINTED - 1 HOUR RATED
- E - OPEN TO STRUCTURE ABOVE
- F - SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH HOLD DOWN CLIPS
- G - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING (VINYL COATED)
- H - SUSPENDED WOOD PANEL CEILING SYSTEM
- I - EXTERIOR METAL SOFFIT SYSTEM. APPLY 3" CLOSED CELL SPRAY FOAM INSULATION ON UNDERSIDE OF DECK, WHERE OCCURS.
- J - SPRAY APPLIED ACOUSTICAL TREATMENT ON METAL DECK, WHITE - PAINT ALL BUILDING STRUCTURE, OVERHEAD MEP, ETC TO MATCH INSULATION COLOR

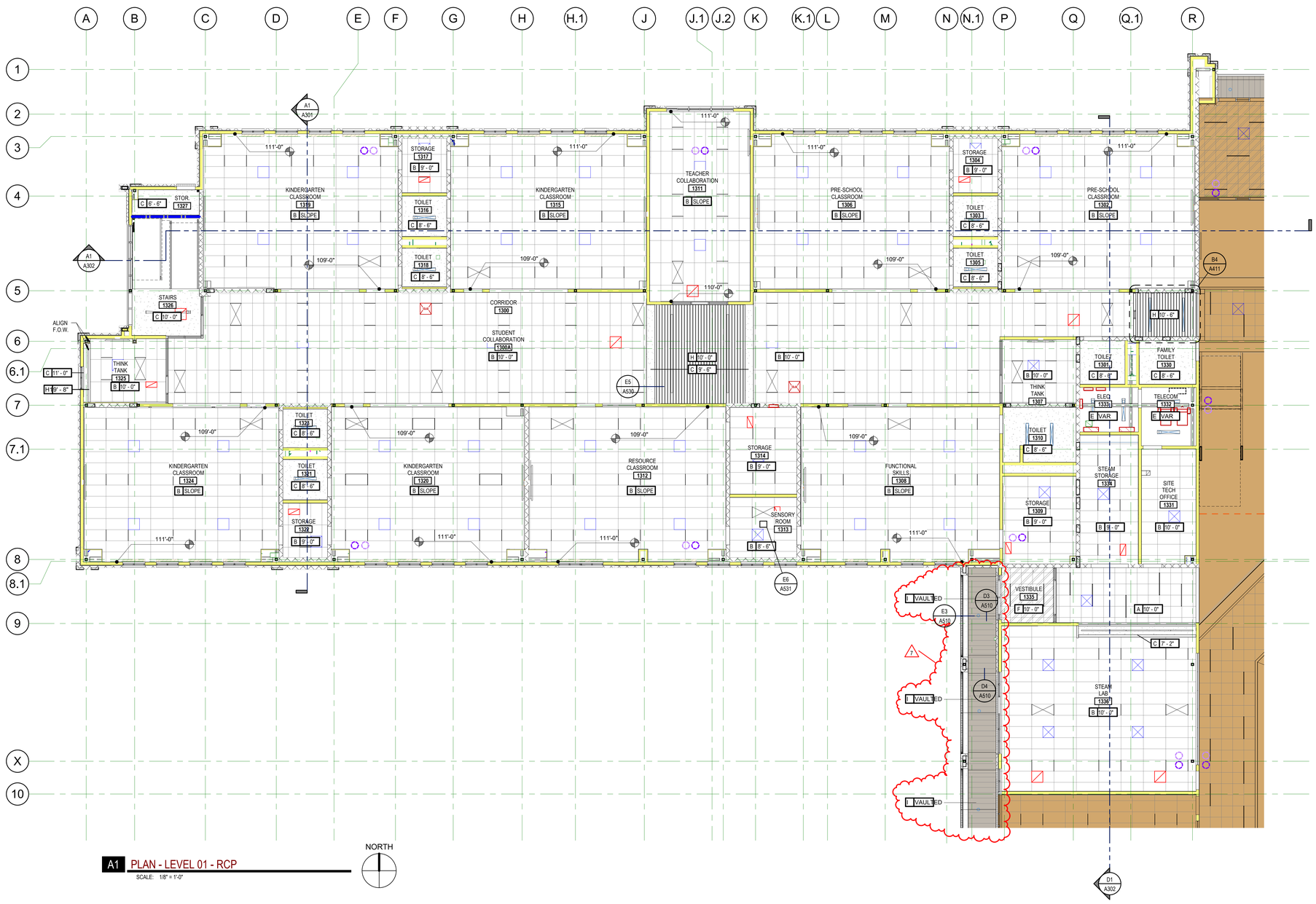
CEILING SYMBOLS

ELECTRICAL

- 2'X4' FLUORESCENT FIXTURE
- 2'X2' FLUORESCENT FIXTURE
- 1'X4' FLUORESCENT FIXTURE
- FLUORESCENT STRIP FIXTURE
- RECESSED DOWN LIGHT
- WALL WASH
- 1'X4' FLUORESCENT FIXTURE
- PENDANT LIGHT FIXTURE
- EXIT SIGN, SINGLE-SIDED
- EXIT SIGN, DOUBLE-SIDED
- FIRE ALARM
- SPEAKER
- SMOKE DETECTOR
- WIRELESS INTERNET

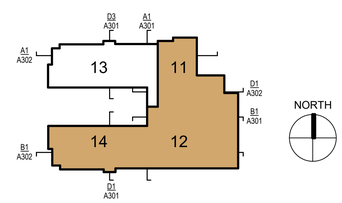
MECHANICAL

- SUPPLY GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- SPRINKLER HEAD - CEILING MOUNT
- SPRINKLER HEAD - WALL MOUNT



KEYED NOTES

KEY PLAN - MAIN LEVEL



A1 PLAN - LEVEL 01 - RCP

SCALE: 1/8" = 1'-0"

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STATE OF UTAH — DANIEL SHERWOOD — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
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7	11/27/2023	BPS-ADDENDUM 03

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BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 13 ENLARGED REFLECTED CEILING PLAN - LEVEL 01

A113.4

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KEYED NOTES

611	16" ADJUSTABLE SHELVING, U.N.O.
619	24" ADJUSTABLE SHELVING, U.N.O.
620	12" ADJUSTABLE SHELVING, U.N.O.
1026.1	SS MAGNETIC STRIP, 1 1/2
1039	48"X60" WHITE BOARD
1040	72"X60" WHITE BOARD
1041	96"X60" WHITE BOARD
1210	MOBILE COMPUTER CART, NIC
2200	SINK AND FAUCET
2205	DRINKING FOUNTAINS HIGH/LOW, W/ BOTTLE FILLER OVER LOWER FOUNTAIN
2304	RETURN AIR CHASE AND MECHANICAL GRILLE, W/ MTL. STUD FRAMING & GYP. BD. SURROUND, SEE PLANS & INT. ELEVATIONS. PAINT INSIDE OF CHASE WALLS BLACK.

PLAN NOTES

1. WHERE FLOOR DRAINS ARE INSTALLED THE FLOOR IS TO SLOPE TO THE DRAIN. THE MAXIMUM SLOPE IS NOT TO EXCEED 2% WHILE THE MINIMUM SLOPE IS NOT TO BE LESS THAN 1%.
2. WHERE CONCRETE PADS ARE CALLED TO BE CONSTRUCTED UNDER EQUIPMENT THE SLAB IS TO BE 8" THICK, U.N.O., AND IS TO HAVE #4 BARS AT 18" O.C. EACH WAY. COORDINATE DIMENSIONS OF PAD WITH ACTUAL EQUIPMENT SPEC.
3. ALL MECHANICAL ROOMS TO RECEIVE A CONCRETE CURB AROUND INSIDE PERIMETER WALLS. SEE SHEET A573 FOR CURB DETAILS
4. SEE SHEET **A573** AND **A574** FOR TYPICAL FLOORING TRANSITION DETAILS.
5. THE CONTRACTOR IS TO ENSURE THAT BETWEEN ANY FINISH FLOOR ELEVATION TO 36" A.F.F. ALL GUARDRAILS ARE TO BE CONSTRUCTED AND INSTALLED SO THAT A 4 3/8" SPHERE WILL NOT PASS BETWEEN ANY TWO ADJACENT GUARDRAIL COMPONENTS OR BETWEEN THE EDGE OF A GUARDRAIL AND ALL ADJACENT BUILDING ELEMENT SUCH AS A WALL OR FLOOR. AN 4 3/8" DIAMETER SPHERE IS NOT TO PASS BETWEEN THE ABOVE MENTIONED COMPONENTS AND ELEMENTS FROM AN ELEVATION 36" A.F.F. AND HIGHER.
6. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

PARTITION + FRAMING GENERAL NOTES

FRAMED WALL PARTITIONS

1. PARTITION TYPE INDICATIONS ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH SHEETS AND INTERIOR ELEVATIONS FOR WALL FINISHES INCLUDING TILE COURSING AND LAYOUT AND/OR THE DESIGNATIONS ON THE PLANS FOR ADDITIONAL INFORMATION REGARDING APPLIED FINISHES.
2. WHERE PARTITION TYPE DESIGNATION ON FLOOR PLANS IS INTERRUPTED BY DOOR OPENING, GLAZED PARTITION, ETC., CONSTRUCTION ABOVE INTERRUPTION (AND WHERE APPLICABLE BELOW) IS TO BE THE SAME AS THAT DESIGNATED FOR THE PARTITION IN WHICH THE INTERRUPTION OCCURRED.
3. THE MINIMUM REQUIREMENTS FOR CONSTRUCTION OF EACH PARTITION TYPE AS EXPRESSED BY THE INDICATED REFERENCE ARE INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THE WORK OF THIS PROJECT. HOWEVER, ADDITIONAL AND/OR MORE RESTRICTIVE REQUIREMENTS MAY BE INDICATED BY THE SPECIFICATIONS AND DRAWINGS. SUCH REQUIREMENTS ALSO APPLY AND SHALL GOVERN. SUCH REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   a. USE 5/8" THICK GYPSUM BOARD THROUGHOUT UNLESS NOTED OTHERWISE.
   b. USE 16" OC MAX STUD SPACING UNLESS NOTED OTHERWISE IN THESE DOCUMENTS. THE SPACING STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MAX SPACING IF ALLOWED IN THESE DOCUMENTS.
   c. USE STUDS OF GAUGE INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. THE GAUGE STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM GAUGE TESTED, 20 GA (30 MILS) IS THE MINIMUM ALLOWED IN THESE DOCUMENTS.
4. USE STUDS OF DEPTH INDICATED BY THIS SET OF DOCUMENTS. THE DEPTH STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM DEPTH TESTED DEPTH ALLOWED IN THESE DOCUMENTS. SEE STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CONSTRUCTION OF CONCRETE, MASONRY AND STUD WALLS
5. PROVIDE FIRE RATED CONSTRUCTION ASSEMBLIES WHERE INDICATED ON SHEETS G100's AND FLOOR PLAN DRAWINGS.
6. ALL DIMENSIONS ARE CENTER OF STUD OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. FACE OF STUD WILL BE NOTED AS FOS AND FACE OF FINISHED WALL WILL BE NOTED AS FOW.
7. AT ALL INTERIOR WALLS, STUDS, INSULATION AND GYPSUM BOARD ARE TO EXTEND TO THE DECK ABOVE. UNLESS NOTED OTHERWISE.
8. WALL TYPES NOT NOTED ARE ASSUMED TO MATCH ADJACENT ROOMS. SEE SHEETS FOR FINISHES, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. ALL METAL STUD PARTITIONS ARE CONSIDERED ACOUSTIC PARTITIONS AND ARE TO RECEIVE A TYPE 1 SOUND ATTENUATION BLANKET. THICKNESS TO MATCH STUD DEPTH, UNLESS NOTED OTHERWISE.
10. REFER TO SHEET **A520** FOR TYPICAL INTERIOR WALL CONDITIONS ASSOCIATED WITH ALL METAL STUD PARTITIONS.
11. PROVIDE CONTROL JOINTS IN METAL FRAMED WALLS AT APPROXIMATELY 30 FEET ON CENTER. LOCATE AT CORNER ABOVE DOORS OR INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. **CONSULT WITH ARCHITECT PRIOR TO COMMENCING FRAMING.** INSTALL PER DETALS **C2 AND C3/ A520** FOR CONTROL JOINTS.
12. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., GYPSUM BOARD IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM. THE OPENING FOR DUCTS OR LARGE PENETRATIONS SHALL BE FRAMED WITH A HEADER, ADD AN ANGLED CORNER BRACE IF THE GAP EXCEEDS 3" FROM FRAMING TO THE OPENING.
13. PROVIDE BLOCKING / BACKING FOR ALL WALL MOUNTED EQUIPMENT. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR CABINETS, GRAB BARS ETC. INSTALL BLOCKING AS DETAILED OR AS REQUIRED TO MOUNT SUCH DEVICES. ALL BLOCKING IS TO BE FIRE RETARDANT TREATED. INSTALL PER SHEET **A520**
14. **WHERE THERE IS LIMITED WATER EXPOSURE:** INSTALL ONE LAYER OF 5/8" TYPE X WATER RESISTANT GYPSUM BOARD PER ASTM C1396 (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION AT THE FOLLOWING LOCATIONS.
   a. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITORS SINKS
   b. AT OTHER LOCATIONS, I.E. TOILET ROOMS AND KITCHENS, AND AS INDICATED ON THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
15. INSTALL ONE LAYER OF 5/8" GLASS MAT TILE BACKER BOARD IN LIEU OF GYPSUM BOARD (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION WHERE THERE IS NO FIRE RATING AND OVER GYPSUM BOARD FACE LAYER AT FIRE RATED PARTITIONS AT THE FOLLOWING LOCATIONS.
16. AT WET LOCATIONS, SUCH AS SHOWER STALLS AND TUB SURROUNDS.
   a. WHERE CERAMIC TILE FINISHES ARE INDICATED PER THE FINISH PLANS AND/OR INTERIOR ELEVATIONS.
   b. AT OTHER LOCATIONS AS INDICATED BY THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
17. WHERE NEW WALLS OR FURRING ARE INDICATED TO BE DIMENSIONED OFF OF AN EXISTING WALL, THE NEW WALL SHALL BE STRAIGHT AND PLUMB REGARDLESS OF THE CONDITION OF THE EXISTING WALL.
18. ALL EXTERIOR STUD WALLS TO HAVE CONTINUOUS INSULATION, VAPOR BARRIER AND AIR INFILTRATION BARRIER FOR THE FULL HEIGHT AND LENGTH OF THE WALL SEAL ALL PENETRATIONS. SEE DETAILS ON SHEET **A520** FOR TYPICAL TOP OF WALL CONDITION
19. THE AIR INFILTRATION BARRIER IS TO WRAP INTO ALL WINDOW AND DOOR OPENINGS.
20. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

MASONRY OR CONCRETE WALLS

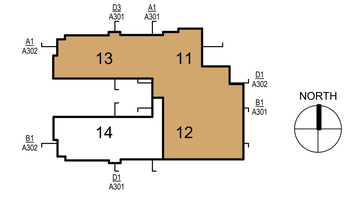
1. SEE STRUCTURAL PLANS FOR ADDITIONAL CONCRETE AND MASONRY WALL INFORMATION.
2. SEE EXTERIOR ELEVATIONS FOR COURSING, MASONRY TYPES AND METAL PANEL ORIENTATION PER **EXTERIOR ELEVATION SHEETS.**
3. ALL MASONRY WALLS ARE TO BE REINFORCED AND ARE TO BE SET ON REINFORCED FOOTINGS. SEE THE **EXTERIOR ELEVATION SHEETS** FOR LOCATION OF CONTROL JOINTS. WHERE NOT NOTED, CONTROL JOINTS TO BE LOCATED AS PER THE REQUIREMENTS FOUND IN THE STRUCTURAL DOCUMENTS BUT ARE NOT TO EXCEED 30' OC. SEE THE STRUCTURAL DRAWINGS FOR REINFORCING AND OTHER DETAILS PERTAINING TO MASONRY WALLS. IF NOT OTHERWISE NOTED, LOCATE CONTROL JOINTS AT CORNER ABOVE DOORS, INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. CONSULT WITH ARCHITECT PRIOR TO INSTALLING PER DETAIL **C1 A520**
4. SEE IBC 2021, CHAPTER 7 FOR FIRE RESISTIVE REQUIREMENTS ON NEW CONCRETE AND CONCRETE MASONRY UNIT WALLS.
   - CMU WALLS (IBC TABLE 721.1(2), ITEM 3)
   - CAST IN PLACE CONCRETE WALLS (IBC TABLE 722.2.1.1)
5. REFER TO DETAIL SHEET **A520** FOR TYPICAL WALL CONDITIONS ASSOCIATED WITH ALL AND MASONRY PARTITIONS.
6. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., MASONRY IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM.
7. **PROTECTION OF MASONRY:** DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK, EXCEPT WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO REMAIN ABOVE 65 DEG F AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS. (THIS IS TO PREVENT CONDENSATION FROM COVERED WALLS CAUSING A MOISTURE PROBLEM.) COVER PARTIALLY COMPLETED MASONRY EACH DAY THAT CONSTRUCTION IS NOT IN PROGRESS. WALLS ARE TO BE PROTECTED UNTIL THEY ARE PERMANENTLY PROTECTED BY THE ROOFING MEMBRANE OVER THE CAP PLATE. THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY PROTECTION IMMEDIATELY FOLLOWING THE TOPPING OUT OF EACH SECTION OF WALL BY INSTALLING WATERPROOF SHEETING OVER A CONTINUOUS CAP PLATE UNTIL THE ROOFING MEMBRANE IS INSTALLED. **A SOLID GROUTED TOP BOND BEAM SHALL NOT BE CONSIDERED ADEQUATE PROTECTION FOR THE WALL.**
8. IT IS ACCEPTABLE TO PLACE NON-INTEGRAL COLORED CMU IN PORTIONS OF WALLS INDICATED TO BE CONSTRUCTED OF INTEGRAL COLOR CMU IF THE DOCUMENTS SHOW THESE PORTIONS OF WALL PAINTED OR COVERED WITH TILE, STUD FURRING, ABOVE CEILINGS OR UNDER ROOFING MEMBRANE. IT IS NOT ACCEPTABLE TO UTILIZE NON INTEGRAL COLORED CMU BEHIND CABINETS, FURNISHINGS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CLIMBING WALLS AND LOCKERS.
9. AT ALL SPLIT FACE AND PAINTED CMU THE HORIZONTAL AND VERTICAL MORTAR JOINTS ARE TO BE CONCAVE. AT ALL HONED BLOCK THE HORIZONTAL MORTAR JOINT IS TO BE A WEATHERED JOINT AND ALL VERTICAL JOINTS ARE TO BE RAKED.
10. PROVIDE A 3/4" CHAMFER ALL INTERIOR EXPOSED VERTICAL MASONRY CORNERS FROM 8' AFF TO BOTTOM OF MASONRY LINTEL OR IF NO LINTEL EXISTS, STOP CHAMFER @ FIRST MASONRY JOINT BELOW CEILING. NOTE THAT THIS CHAMFER IS NOT TO BE PROVIDED AT CORNERS SHOWN IN THESE DOCUMENTS AS COVERED WITH WALL TILE. SEE DETAIL
11. **PROVIDE SPECIAL SHAPES**, SUCH AS "U" SHAPED CHANNEL FOR LINTELS OR HEADERS AND CAPPING UNITS FOR SASH AND OTHER SPECIAL CONDITIONS.
12. WHERE SPLIT FACE BLOCK IS SHOWN EXTENDING TO THE TOP OF A PARAPET, PROVIDE AN INTEGRAL COLOR SMOOTH FACE BLOCK AT THE TOP COURSE TO ALLOW THE CAP FLASHING TO FIT TIGHT AGAINST THE WALL.
13. CONTRACTOR TO COORDINATE AND PROVIDE SMOOTH MASONRY AT ALL FLASHING, REGLETS, GUTTERS, EDGES OF CEILING AND BASE AND OTHER ITEMS REQUIRING A SMOOTH FINISH THAT ARE HIDDEN.

A1 PLAN - LEVEL 01 - ANNOTATED D

SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - MAIN LEVEL



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DATE: DECEMBER 08, 2023

STATE OF UTAH — REGISTERED — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 14 ENLARGED ANNOTATED PLAN - LEVEL 01

A114.1

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DIMENSION NOTES

1. ALL DIMENSIONS ARE TO CENTER OF STUD WALL OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. WHERE THE END OF A WALL IS INDICATED THE DIMENSION IS TO THE FINISH SURFACE OF THE WALL END.
2. UNLESS DIMENSIONED OTHERWISE, THE DIMENSION FROM THE BUCK OF A DOOR FRAME IS TO BE 4" TO THE WALL CORNER.
3. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN, DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED.
4. SMOKE AND FIRE RATED WALLS SHALL PERMANENTLY BE IDENTIFIED WITH SIGNS OR STENCILING IN THE CONCEALED SPACE. SUCH IDENTIFICATION SHALL BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8-INCH STROKE IN A CONTRASTING COLOR INCORPORATING THE WORDING, "FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS"

KEY FOR PARTITION TYPES

SEE SHEET A500 FOR WALL TYPE DETAILS AND NOTES

DENOTES TYPE OF CONSTRUCTION (SPEC. DIVISION) — WALL

4A8

3X 0 SERIES CONCRETE
4X 0 SERIES MASONRY
5X 0 SERIES COLD FORMED METAL STUDS, 16 GA MIN.
9X 0 SERIES METAL STUDS

NOMINAL SIZES: V = VARIABLE/MATCHEXISITING
1 = 1 5/8" STUDS
2 = 2 1/2" STUDS
3 = 3 5/8" STUDS
4 = 4" STUDS / 4" (NOM.) C.M.U.
6 = 6" STUDS / 6" (NOM.) C.M.U.
8 = 8" STUDS / 8" (NOM.) C.M.U.
10 = 10" (NOM.) C.M.U. OR CONC.
12 = 12" (NOM.) C.M.U. OR CONC.

EXAMPLE: WALL TYPE 9A3 IS A 3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD ON BOTH SIDES.

RATED WALL LEGEND

- INCIDENTAL USE AREAS
- 1 HOUR SEPARATION
- 2 HOUR SEPARATION
- 3 HOUR SEPARATION

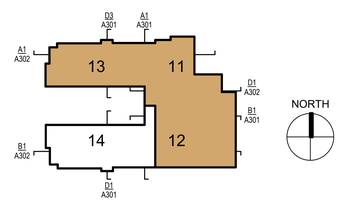
EXAMPLE: WALL TYPE 9A3-1 IS A ONE HOUR RATED, 3 5/8" METAL STUD WALL WITH 5/8" GYPSUM BOARD ON BOTH SIDES, PER ASSEMBLY REQUIREMENTS.

90X-R SERIES
FIRE RATING (ONLY WHEN NOTED): 1 = 1 HOUR RATED ASSEMBLY
2 = 2 HOUR RATED ASSEMBLY
3 = 3 HOUR RATED ASSEMBLY

A1 PLAN - LEVEL 01 - DIMENSION + WALL TYPE
SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - MAIN LEVEL



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CLIENT NUMBER: -
DATE: DECEMBER 08, 2023

STATE OF UTAH — 7067968 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

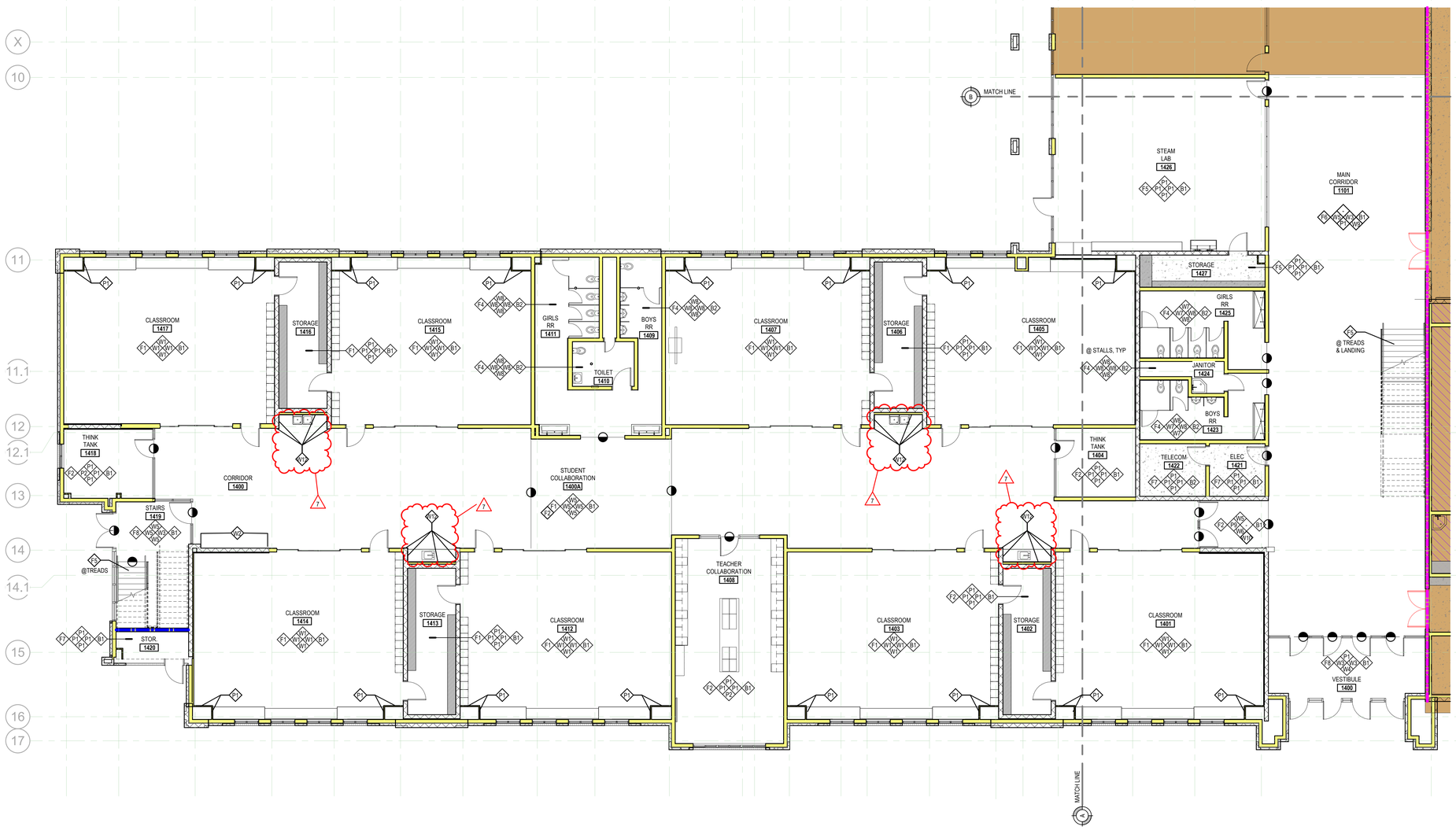
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 14 ENLARGED
DIMENSION + WALL TYPE
PLAN - LEVEL 01

A114.2

12/4/2023 3:24:27 PM

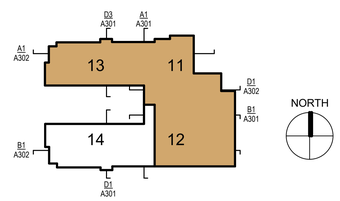


A1 AREA 14 FINISH PLAN

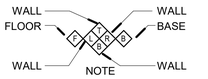
SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - MAIN LEVEL



FINISH PLAN SYMBOLS



SINGLE FINISH SYMBOLS INDICATE WHERE FINISHES ARE DIFFERENT FROM GENERAL ROOM FINISHES, OR PROVIDE ADDITIONAL FINISH INFORMATION

CHANGE AT FLOOR MATERIAL

IN ANY SPACE WHERE FINISHES ARE NOT DESIGNATED, ASSUME THE FOLLOWING FINISHES:

B2 4" RUBBER BASE
F1 CARPET TILES - GENERAL FIELD - LAID IN LINEAR BRICK PATTERN
W1: PRIMED & PAINTED WALL - GENERAL COLOR - EPOXY PAINT IN WE/DAMP AREAS
W3: SEALED CMU WHERE CMU IS PRESENT

GENERAL FINISH NOTES

1. PROVIDE EPOXY PAINT AT ALL RESTROOMS, SHOWERS, LOCKER ROOMS AND JANITOR CLOSETS.
2. ALL PAINTED STEEL BRACING AND COLUMNS TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. AT SOFFITS RECEIVING COLOR - PAINT ALL SIDES OF SOFFIT.
4. ALL METAL GUARDRAILS AND STAIR STRINGERS TO BE PAINTED SEE FINISH SCHEDULE FOR H.M. DOOR AND FRAME PAINT COLORS.
5. ALL EXPOSED CEILINGS TO BE PAINTED. REFER TO REFLECTED CEILING PLANS.
6. ALL FLOOR TRANSITIONS TO BE LOCATED AT CENTER OF DOOR, U.N.O. ALL FLOOR TRANSITIONS AT FLOOR TILE (T1) LOCATIONS TO BE LOCATED AT INSIDE CORNER OF DOOR.
7. PROVIDE FLOOR FINISH 'RT': RUBBER STAIR TREAD' AT STAIR TREADS AND LANDING.
8. PROVIDE A SMOOTH TRANSITION AT ALL FLOOR MATERIALS - CONTRACTOR TO INSTALL ALL FLOOR FINISHES AT SAME LEVEL, DESPITE DIFFERENT THICKNESS. PROVIDE FLOOR TRANSITION WHERE OCCURS.
9. SEE SHEET AXXX FOR FLOORING TRANSITION DETAILS.
10. SEE ELEVATION SHEETS FOR ALL WALL TILE PATTERNS.
11. PROVIDE TILE 4"X4" CERAMIC WALL TILE AT ALL JANITOR SINKS UNLESS NOTED OTHERWISE. PROVIDE TILE BULLNOSE TO FINISH OFF ALL EXPOSED EDGES.
12. ALL WALLS RECEIVING TILE WAINSCOT TO RECEIVE PAINT P1 ABOVE, U.N.O. SEE FINISH PLANS FOR ACCENT WALL LOCATIONS.
13. ALL GROUT JOINTS TO BE NO LARGER THAN 1/8".
14. PROVIDE 'CG: CORNER GUARD' AT ALL LOCATIONS WHERE TILE WAINSCOT WRAPS GYP. BD. CORNERS. CAP ALL TILE WAINSCOT WITH SCHLUTER STRIP (SL).
15. AT ALL TILE WAINSCOT, SCRIBE BOTTOM TILE TO MATCH FINISH FLOOR SURFACE AND CAULK WITH BASE 'RB'.
16. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF MILLWORK.
17. COORDINATE ALL MILLWORK WITH APPLIANCES BEFORE FABRICATION.
18. ALL COUNTERTOP, BACKSPLASHES, AND EDGE BANDING TO HAVE COORDINATING FINISHES.
19. ALL WOOD TRIM TO BE STAINED TO MATCH DOOR STAIN.

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH — SHAWN B. [illegible] — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 14 ENLARGED FINISH PLAN - LEVEL 01

A114.3

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HEADER SCHEDULE

H1	GYP. HEADER
H2	MASONRY HEADER

GENERAL CEILING NOTES

1. REFER TO DETAIL **C6/A530** FOR TYPICAL CEILING SUSPENSION & SEISMIC BRACING
2. REFER TO DETAIL **A6/A530** FOR TYPICAL SUSPENDED GYP. BOARD CEILINGS
3. ALL UNIDENTIFIED CEILING TYPES ON THE PLANS SHALL BE TYPE " A" AT 9'-4" A.F.F.
4. GRID SUSPENSION SYSTEMS SHALL BE CENTERED WITHIN AREAS INDICATED, UNLESS NOTED OTHERWISE
5. PAINT ALL EXPOSED STRUCTURE, MECHANICAL, DUCTS, ELECTRICAL WORK, PIPING, ETC. ALL VISIBLE ELEMENTS TO BE PAINTED AT TYPE "E" & TYPE "F" (ABOVE VENTWOOD)
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF MECHANICAL GRILLES, AND TO MECHANICAL DRAWINGS FOR QUANTITIES AND TYPES
7. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF LIGHT FIXTURES AND TO ELECTRICAL DRAWINGS FOR QUANTITY AND TYPES
8. MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE WORK WITH SPRINKLER CONTRACTOR TO AVOID CONFLICTS IN FIELD
9. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
10. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED.
11. HEADER HEIGHTS TO BE 9'-0" UNO.
12. CEILING TILE SHALL BE LISTED & TESTED ASTM E 84 & HAVE A FLAME SPREAD OF 0-25 & A SMOKE INDEX OF 0-450. IF THE CEIING TILE IS A COMPONENT PART OF A PLENUM SYSTEM THEN IT SHALL BE LISTED & TESTED PER ASTM E 84 & HAVE A FLAME SPREAD F 0-25 & A SMOKE INDEX OF 0-50.

CEILING LEGEND

- A - SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
- B - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING
- C - SUSPENDED 5/8" GYP. BD. CEILING SYSTEM - PAINTED (EPOXY PAINT AT WET LOCATIONS)
- D - SUSPENDED 5/8" GYP. CEILING SYSTEM (2 LAYERS) , PAINTED - 1 HOUR RATED
- E - OPEN TO STRUCTURE ABOVE
- F - SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH HOLD DOWN CLIPS
- G - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING (VINYL COATED)
- H - SUSPENDED WOOD PANEL CEILING SYSTEM
- I - EXTERIOR METAL SOFFIT SYSTEM. APPLY 3" CLOSED CELL SPRAY FOAM INSULATION ON UNDERSIDE OF DECK, WHERE OCCURS.
- J - SPRAY APPLIED ACOUSTICAL TREATMENT ON METAL DECK, WHITE - PAINT ALL BUILDING STRUCTURE, OVERHEAD MEP, ETC TO MATCH INSULATION COLOR

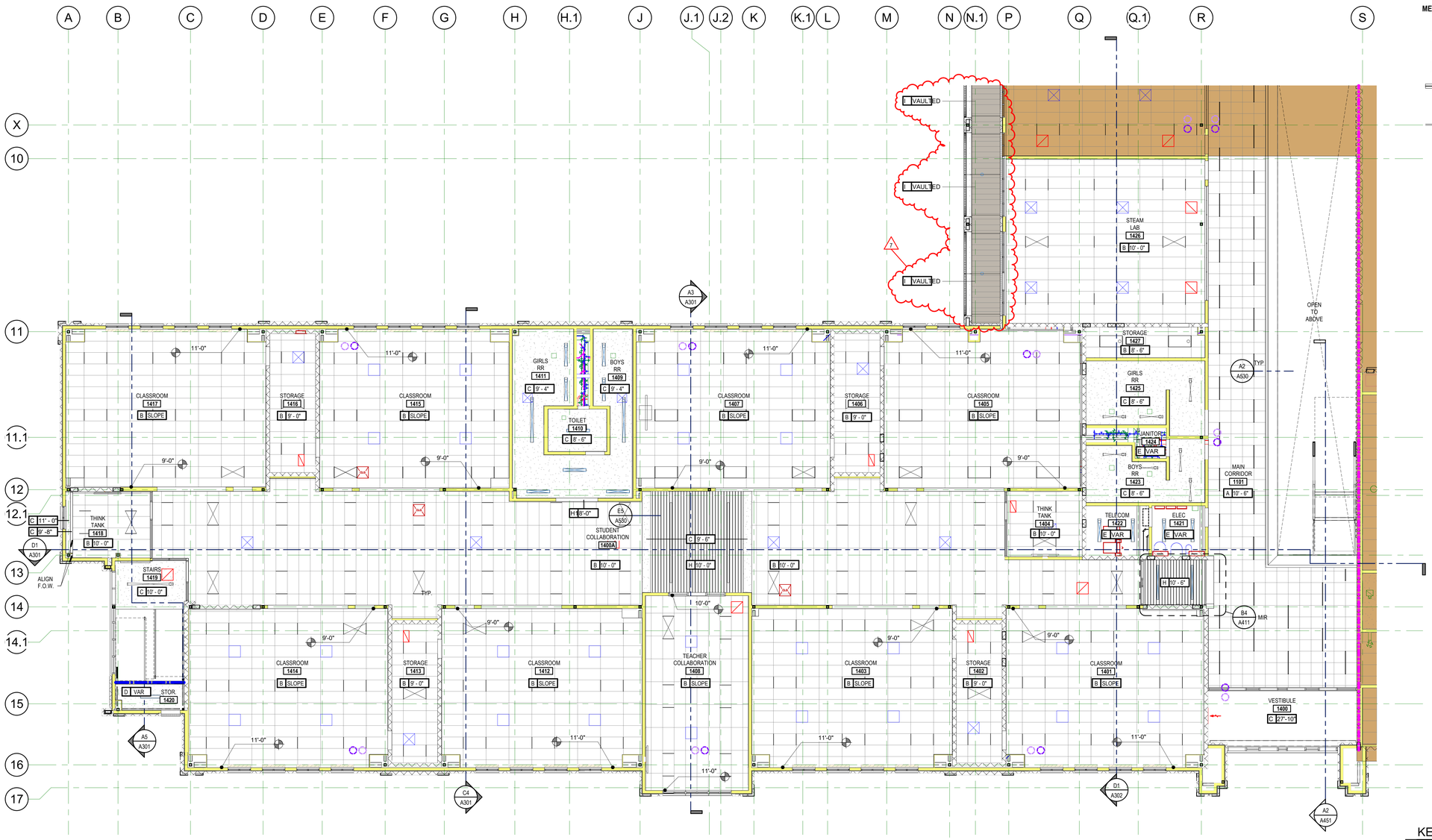
CEILING SYMBOLS

ELECTRICAL

- 2'X4' FLUORESCENT FIXTURE
- 2'X2' FLUORESCENT FIXTURE
- 1'X4' FLUORESCENT FIXTURE
- FLUORESCENT STRIP FIXTURE
- RECESSED DOWN LIGHT
- WALL WASH
- 1'X4' FLUORESCENT FIXTURE
- PENDANT LIGHT FIXTURE
- EXIT SIGN, SINGLE-SIDED
- EXIT SIGN, DOUBLE-SIDED
- FIRE ALARM
- SPEAKER
- SMOKE DETECTOR
- WIRELESS INTERNET

MECHANICAL

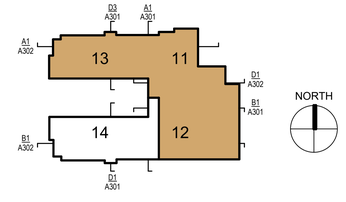
- SUPPLY GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- SPRINKLER HEAD - CEILING MOUNT
- SPRINKLER HEAD - WALL MOUNT



A1 PLAN - LEVEL 01 - RCP D

SCALE: 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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STATE OF UTAH — BRENT SHERWOOD — 7067868 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

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OSD HILLCREST ELEMENTARY REBUILD

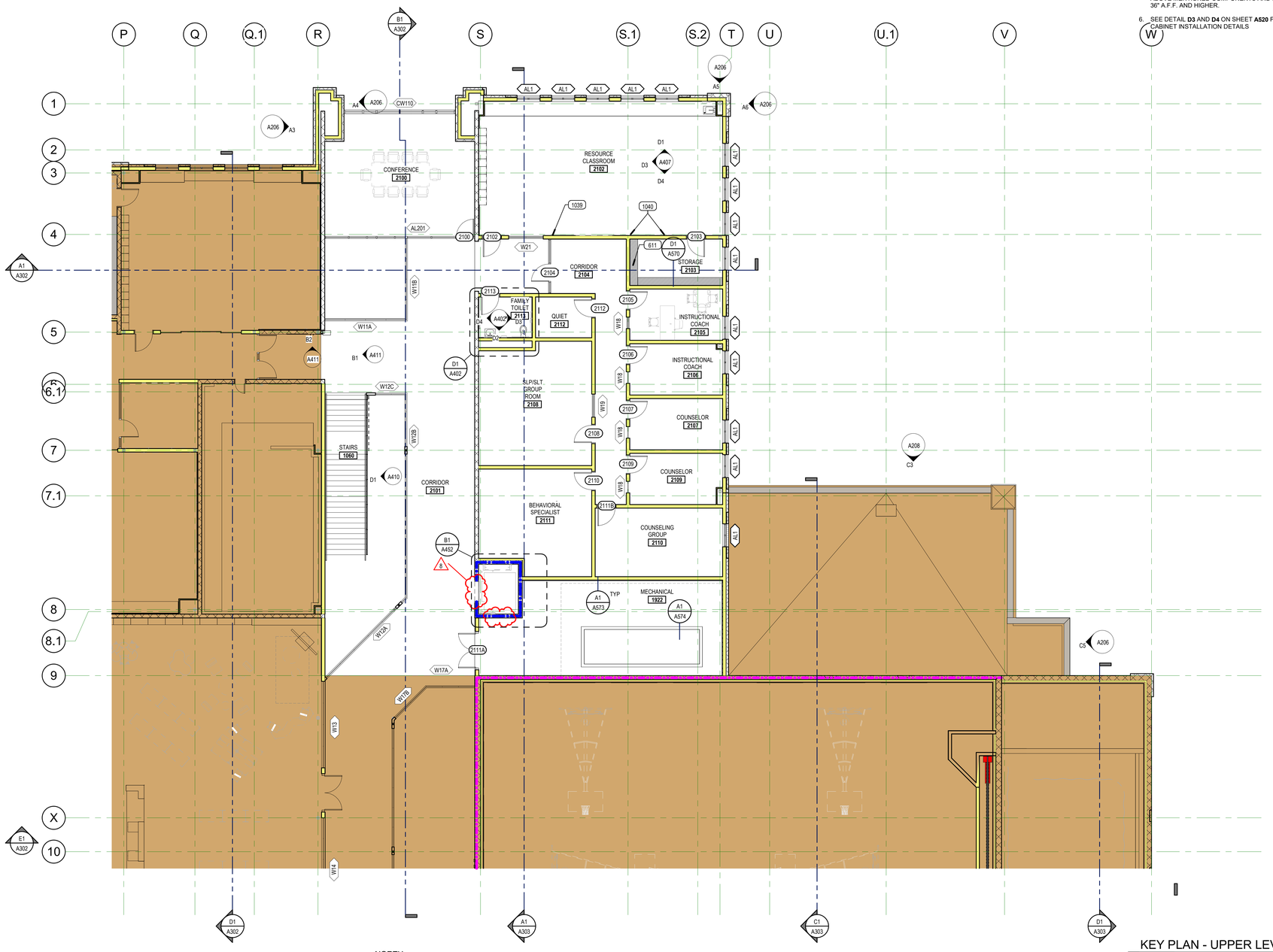
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 14 ENLARGED REFLECTED CEILING PLAN - LEVEL 01

A114.4

11/27/2023 12:44:23 PM



A1 PLAN - LEVEL 02 - ANNOTATED B

SCALE: 1/8" = 1'-0"

NORTH

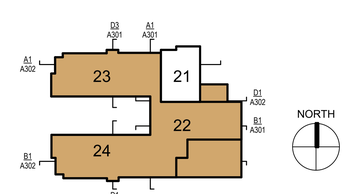
KEYED NOTES

611 16" ADJUSTABLE SHELVING, U.N.O.
1039 48"X60" WHITE BOARD
1040 72"X60" WHITE BOARD

PLAN NOTES

1. WHERE FLOOR DRAINS ARE INSTALLED THE FLOOR IS TO SLOPE TO THE DRAIN. THE MAXIMUM SLOPE IS NOT TO EXCEED 2% WHILE THE MINIMUM SLOPE IS NOT TO BE LESS THAN 1%.
2. WHERE CONCRETE PADS ARE CALLED TO BE CONSTRUCTED UNDER EQUIPMENT THE SLAB IS TO BE 8" THICK, U.N.O., AND IS TO HAVE #4 BARS AT 18" O.C. EACH WAY. COORDINATE DIMENSIONS OF PAD WITH ACTUAL EQUIPMENT SPEC.
3. ALL MECHANICAL ROOMS TO RECEIVE A CONCRETE CURB AROUND INSIDE PERIMETER WALLS. SEE SHEET A573 FOR CURB DETAILS
4. SEE SHEET **A573** AND **A574** FOR TYPICAL FLOORING TRANSITION DETAILS.
5. THE CONTRACTOR IS TO ENSURE THAT BETWEEN ANY FINISH FLOOR ELEVATION TO 36" A.F.F. ALL GUARDRAILS ARE TO BE CONSTRUCTED AND INSTALLED SO THAT A 4 3/8" SPHERE WILL NOT PASS BETWEEN ANY TWO ADJACENT GUARDRAIL COMPONENTS OR BETWEEN THE EDGE OF A GUARDRAIL AND ALL ADJACENT BUILDING ELEMENT SUCH AS A WALL OR FLOOR. AN 4 3/8" DIAMETER SPHERE IS NOT TO PASS BETWEEN THE ABOVE MENTIONED COMPONENTS AND ELEMENTS FROM AN ELEVATION 36" A.F.F. AND HIGHER.
6. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

KEY PLAN - UPPER LEVEL



PARTITION + FRAMING GENERAL NOTES

FRAMED WALL PARTITIONS

1. PARTITION TYPE INDICATIONS ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH SHEETS AND INTERIOR ELEVATIONS FOR WALL FINISHES INCLUDING TILE COURSING AND LAYOUT AND/OR THE DESIGNATIONS ON THE PLANS FOR ADDITIONAL INFORMATION REGARDING APPLIED FINISHES.
2. WHERE PARTITION TYPE DESIGNATION ON FLOOR PLANS IS INTERRUPTED BY DOOR OPENING, GLAZED PARTITION, ETC., CONSTRUCTION ABOVE INTERRUPTION (AND WHERE APPLICABLE BELOW) IS TO BE THE SAME AS THAT DESIGNATED FOR THE PARTITION IN WHICH THE INTERRUPTION OCCURRED.
3. THE MINIMUM REQUIREMENTS FOR CONSTRUCTION OF EACH PARTITION TYPE AS EXPRESSED BY THE INDICATED REFERENCE ARE INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THE WORK OF THIS PROJECT. HOWEVER, ADDITIONAL AND/OR MORE RESTRICTIVE REQUIREMENTS MAY BE INDICATED BY THE SPECIFICATIONS AND DRAWINGS. SUCH REQUIREMENTS ALSO APPLY AND SHALL GOVERN. SUCH REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   a. USE 5/8" THICK GYPSUM BOARD THROUGHOUT UNLESS NOTED OTHERWISE.
   b. USE 16" OC MAX STUD SPACING UNLESS NOTED OTHERWISE IN THESE DOCUMENTS. THE SPACING STATED BY THE REFERENCED APPROVAL OR EST REPORT IS THE MAX SPACING IF ALLOWED IN THESE DOCUMENTS.
   c. USE STUDS OF GAUGE INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. THE GAUGE STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM GAUGE TESTED, 20 GA (30 MILS) IS THE MINIMUM ALLOWED IN THESE DOCUMENTS.
4. USE STUDS OF DEPTH INDICATED BY THIS SET OF DOCUMENTS. THE DEPTH STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM DEPTH TESTED DEPTH ALLOWED IN THESE DOCUMENTS. SEE STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CONSTRUCTION OF CONCRETE, MASONRY AND STUD WALLS
5. PROVIDE FIRE RATED CONSTRUCTION ASSEMBLIES WHERE INDICATED ON SHEETS G100's AND FLOOR PLAN DRAWINGS.
6. ALL DIMENSIONS ARE CENTER OF STUD OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. FACE OF STUD WILL BE NOTED AS FOS AND FACE OF FINISHED WALL WILL BE NOTED AS FOW.
7. AT ALL INTERIOR WALLS, STUDS, INSULATION AND GYPSUM BOARD ARE TO EXTEND TO THE DECK ABOVE. UNLESS NOTED OTHERWISE.
8. WALL TYPES NOT NOTED ARE ASSUMED TO MATCH ADJACENT ROOMS. SEE SHEETS FOR FINISHES, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. ALL METAL STUD PARTITIONS ARE CONSIDERED ACOUSTIC PARTITIONS AND ARE TO RECEIVE A TYPE 1 SOUND ATTENUATION BLANKET. THICKNESS TO MATCH STUD DEPTH, UNLESS NOTED OTHERWISE.
10. REFER TO SHEET **A520** FOR TYPICAL INTERIOR WALL CONDITIONS ASSOCIATED WITH ALL METAL STUD PARTITIONS.
11. PROVIDE CONTROL JOINTS IN METAL FRAMED WALLS AT APPROXIMATELY 30 FEET ON CENTER. LOCATE AT CORNER ABOVE DOORS OR INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. **CONSULT WITH ARCHITECT PRIOR TO COMMENCING FRAMING.** INSTALL PER DETAILS **C2 AND C3/ A520** FOR CONTROL JOINTS.
12. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., GYPSUM BOARD IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM. THE OPENING FOR DUCTS OR LARGE PENETRATIONS SHALL BE FRAMED WITH A HEADER, ADD AN ANGLED CORNER BRACE IF THE GAP EXCEEDS 3" FROM FRAMING TO THE OPENING.
13. PROVIDE BLOCKING / BACKING FOR ALL WALL MOUNTED EQUIPMENT. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR CABINETS, GRAB BARS ETC. INSTALL BLOCKING AS DETAILED OR AS REQUIRED TO MOUNT SUCH DEVICES. ALL BLOCKING IS TO BE FIRE RETARDANT TREATED. INSTALL PER SHEET **A520**
14. **WHERE THERE IS LIMITED WATER EXPOSURE:** INSTALL ONE LAYER OF 5/8" TYPE X WATER RESISTANT GYPSUM BOARD PER ASTM C1396 (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION AT THE FOLLOWING LOCATIONS:
   a. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITORS SINKS
   b. AT OTHER LOCATIONS, I.E. TOILET ROOMS AND KITCHENS, AND AS INDICATED ON THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
15. INSTALL ONE LAYER OF 5/8" GLASS MAT TILE BACKER BOARD IN LIEU OF GYPSUM BOARD (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION WHERE THERE IS NO FIRE RATING AND OVER GYPSUM BOARD FACE LAYER AT FIRE RATED PARTITIONS AT THE FOLLOWING LOCATIONS.
16. AT WET LOCATIONS, SUCH AS SHOWER STALLS AND TUB SURROUNDS.
   a. WHERE CERAMIC TILE FINISHES ARE INDICATED PER THE FINISH PLANS AND/OR INTERIOR ELEVATIONS.
   b. AT OTHER LOCATIONS AS INDICATED BY THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
17. WHERE NEW WALLS OR FURRING ARE INDICATED TO BE DIMENSIONED OFF OF AN EXISTING WALL, THE NEW WALL SHALL BE STRAIGHT AND PLUMB REGARDLESS OF THE CONDITION OF THE EXISTING WALL.
18. ALL EXTERIOR STUD WALLS TO HAVE CONTINUOUS INSULATION, VAPOR BARRIER AND AIR INFILTRATION BARRIER FOR THE FULL HEIGHT AND LENGTH OF THE WALL,SEAL ALL PENETRATIONS. SEE DETAILS ON SHEET **A520** FOR TYPICAL TOP OF WALL CONDITION
19. THE AIR INFILTRATION BARRIER IS TO WRAP INTO ALL WINDOW AND DOOR OPENINGS.
20. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

MASONRY OR CONCRETE WALLS

1. SEE STRUCTURAL PLANS FOR ADDITIONAL CONCRETE AND MASONRY WALL INFORMATION.
2. SEE EXTERIOR ELEVATIONS FOR COURSING, MASONRY TYPES AND METAL PANEL ORIENTATION PER **EXTERIOR ELEVATION SHEETS.**
3. ALL MASONRY WALLS ARE TO BE REINFORCED AND ARE TO BE SET ON REINFORCED FOOTINGS. SEE THE **EXTERIOR ELEVATION SHEETS** FOR LOCATION OF CONTROL JOINTS. WHERE NOT NOTED, CONTROL JOINTS TO BE LOCATED AS PER THE REQUIREMENTS FOUND IN THE STRUCTURAL DOCUMENTS BUT ARE NOT TO EXCEED 30' OC. SEE THE STRUCTURAL DRAWINGS FOR REINFORCING AND OTHER DETAILS PERTAINING TO MASONRY WALLS. IF NOT OTHERWISE NOTED, LOCATE CONTROL JOINTS AT CORNER ABOVE DOORS, INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. CONSULT WITH ARCHITECT PRIOR TO INSTALLING PER DETAIL **C1/ A520**
4. SEE IBC 2021, CHAPTER 7 FOR FIRE RESISTIVE REQUIREMENTS ON NEW CONCRETE AND CONCRETE MASONRY UNIT WALLS.
   - CMU WALLS (IBC TABLE 721.1(2), ITEM 3)
   - CAST IN PLACE CONCRETE WALLS (IBC TABLE 722.2.1.1)
5. REFER TO DETAIL SHEET **A520** FOR TYPICAL WALL CONDITIONS ASSOCIATED WITH ALL AND MASONRY PARTITIONS.
6. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., MASONRY IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM.
7. **PROTECTION OF MASONRY:** DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK, EXCEPT WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO REMAIN ABOVE 65 DEG F AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS. (THIS IS TO PREVENT CONDENSATION FROM COVERED WALLS CAUSING A MOISTURE PROBLEM.) COVER PARTIALLY COMPLETED MASONRY EACH DAY THAT CONSTRUCTION IS NOT IN PROGRESS. WALLS ARE TO BE PROTECTED UNTIL THEY ARE PERMANENTLY PROTECTED BY THE ROOFING MEMBRANE OVER THE CAP PLATE. THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY PROTECTION IMMEDIATELY FOLLOWING THE TOPPING OUT OF EACH SECTION OF WALL BY INSTALLING WATERPROOF SHEETING OVER A CONTINUOUS CAP PLATE UNTIL THE ROOFING MEMBRANE IS INSTALLED. **A SOLID GROUTED TOP BOND BEAM SHALL NOT BE CONSIDERED ADEQUATE PROTECTION FOR THE WALL.**
8. IT IS ACCEPTABLE TO PLACE NON-INTEGRAL COLORED CMU IN PORTIONS OF WALLS INDICATED TO BE CONSTRUCTED OF INTEGRAL COLOR CMU IF THE DOCUMENTS SHOW THESE PORTIONS OF WALL PAINTED OR COVERED WITH TILE, STUD FURRING, ABOVE CEILINGS OR UNDER ROOFING MEMBRANE. IT IS NOT ACCEPTABLE TO UTILIZE NON INTEGRAL COLORED CMU BEHIND CABINETS, FURNISHINGS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CLIMBING WALLS AND LOCKERS.
9. AT ALL SPLIT FACE AND PAINTED CMU THE HORIZONTAL AND VERTICAL MORTAR JOINTS ARE TO BE CONCAVE. AT ALL HONED BLOCK THE HORIZONTAL MORTAR JOINT IS TO BE A WEATHERED JOINT AND ALL VERTICAL JOINTS ARE TO BE RAKED.
10. PROVIDE A 3/4" CHAMFER ALL INTERIOR EXPOSED VERTICAL MASONRY CORNERS FROM 8" AFF TO BOTTOM OF MASONRY LINTEL OR IF NO LINTEL EXISTS, STOP CHAMFER @ FIRST MASONRY JOINT BELOW CEILING. NOTE THAT THIS CHAMFER IS NOT TO BE PROVIDED AT CORNERS SHOWN IN THESE DOCUMENTS AS COVERED WITH WALL TILE. SEE DETAIL.
11. **PROVIDE SPECIAL SHAPES**, SUCH AS "U" SHAPED CHANNEL FOR LINTELS OR HEADERS AND CAPPING UNITS FOR SASH AND OTHER SPECIAL CONDITIONS.
12. WHERE SPLIT FACE BLOCK IS SHOWN EXTENDING TO THE TOP OF A PARAPET, PROVIDE AN INTEGRAL COLOR SMOOTH FACE BLOCK AT THE TOP COURSE TO ALLOW THE CAP FLASHING TO FIT TIGHT AGAINST THE WALL.
13. CONTRACTOR TO COORDINATE AND PROVIDE SMOOTH MASONRY AT ALL FLASHING, REGLETS, GUTTERS, EDGES OF CEILING AND BASE AND OTHER ITEMS REQUIRING A SMOOTH FINISH THAT ARE HIDDEN.

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: DECEMBER 08, 2023

STATE OF UTAH
JARED SHEFFIELD
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

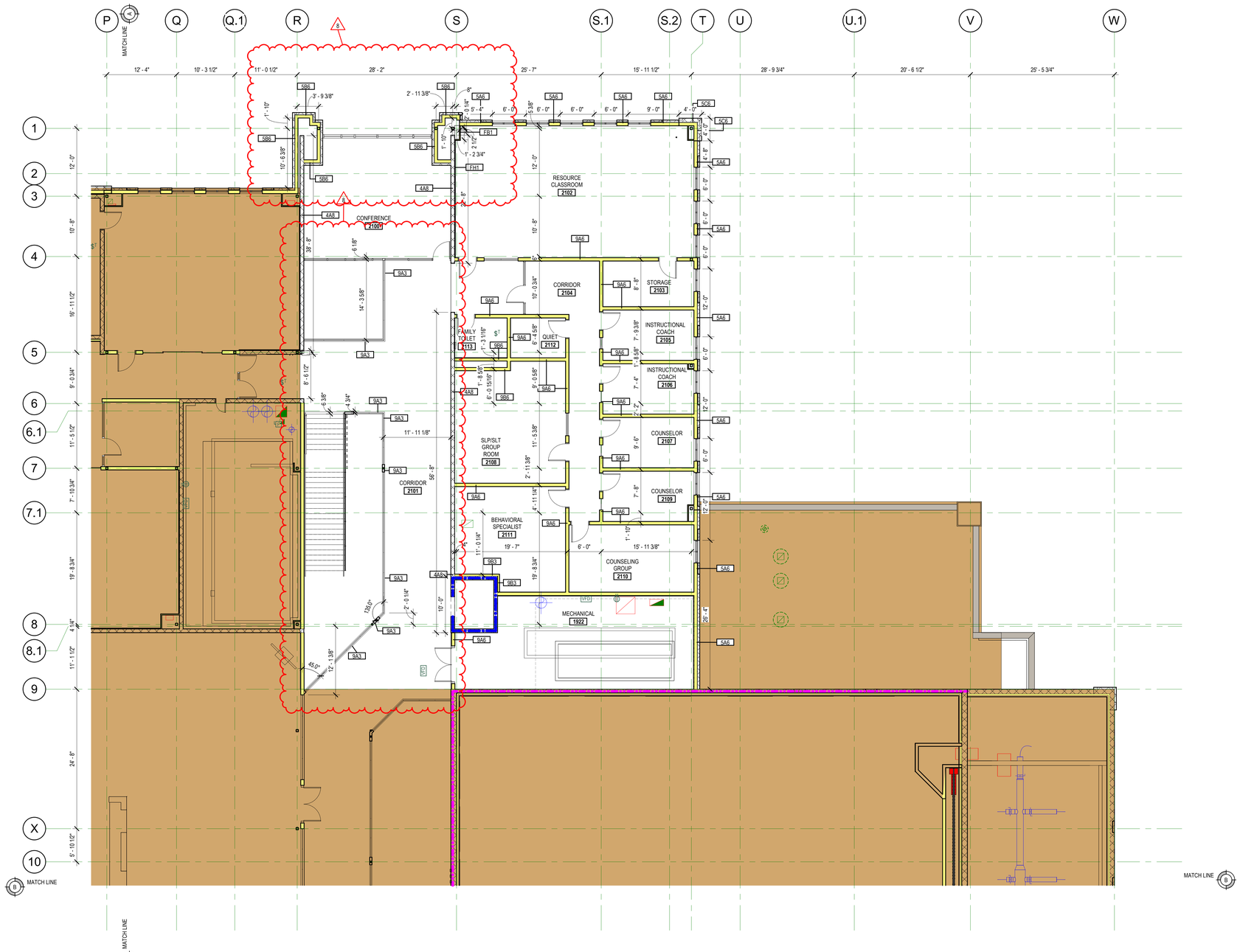
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 21 ENLARGED ANNOTATED PLAN - LEVEL 02

A121.1

12/4/2023 3:24:34 PM



B1 PLAN - LEVEL 02 - DIMENSION + WALL TYPE

SCALE: 1/8" = 1'-0"

DIMENSION NOTES

1. ALL DIMENSIONS ARE TO CENTER OF STUD WALL OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. WHERE THE END OF A WALL IS INDICATED THE DIMENSION IS TO THE FINISH SURFACE OF THE WALL END.
2. UNLESS DIMENSIONED OTHERWISE, THE DIMENSION FROM THE BUCK OF A DOOR FRAME IS TO BE 4" TO THE WALL CORNER.
3. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN, DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED.
4. SMOKE AND FIRE RATED WALLS SHALL PERMANENTLY BE IDENTIFIED WITH SIGNS OR STENCILING IN THE CONCEALED SPACE. SUCH IDENTIFICATION SHALL BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8-INCH STROKE IN A CONTRASTING COLOR INCORPORATING THE WORDING, "FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS"

KEY FOR PARTITION TYPES

SEE SHEET A500 FOR WALL TYPE DETAILS AND NOTES

DENOTES TYPE OF CONSTRUCTION (SPEC. DIVISION) — 4A8 — WALL

3X 0 SERIES CONCRETE
4X 0 SERIES MASONRY
5X 0 SERIES COLD FORMED METAL STUDS, 16 GA MIN.
9X 0 SERIES METAL STUDS

NOMINAL SIZES: V = VARIABLE/MATCHEXISITING
1 = 1 5/8" STUDS
2 = 2 1/2" STUDS
3 = 3 5/8" STUDS
4 = 4" STUDS / 4" (NOM.) C.M.U.
6 = 6" STUDS / 6" (NOM.) C.M.U.
8 = 8" STUDS / 8" (NOM.) C.M.U.
10 = 10" (NOM.) C.M.U. OR CONC.
12 = 12" (NOM.) C.M.U. OR CONC.

EXAMPLE: WALL TYPE 9A3 IS A 3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD ON BOTH SIDES.

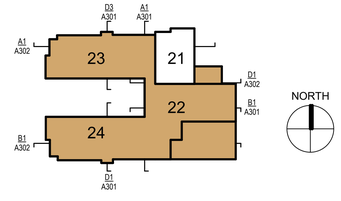
RATED WALL LEGEND

- INCIDENTAL USE AREAS
- 1 HOUR SEPARATION
- 2 HOUR SEPARATION
- 3 HOUR SEPARATION

EXAMPLE: WALL TYPE 9A3-1 IS A ONE HOUR RATED, 3 5/8" METAL STUD WALL WITH 5/8" GYPSUM BOARD ON BOTH SIDES, PER ASSEMBLY REQUIREMENTS.

90X-R SERIES
FIRE RATING (ONLY WHEN NOTED): 1 = 1 HOUR RATED ASSEMBLY
2 = 2 HOUR RATED ASSEMBLY
3 = 3 HOUR RATED ASSEMBLY

KEY PLAN - UPPER LEVEL



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CLIENT NUMBER: -
DATE: DECEMBER 08, 2023

STATE OF UTAH — JARED SHEFFIELD — 7067866 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 21 ENLARGED
DIMENSION + WALL TYPE
PLAN - LEVEL 02

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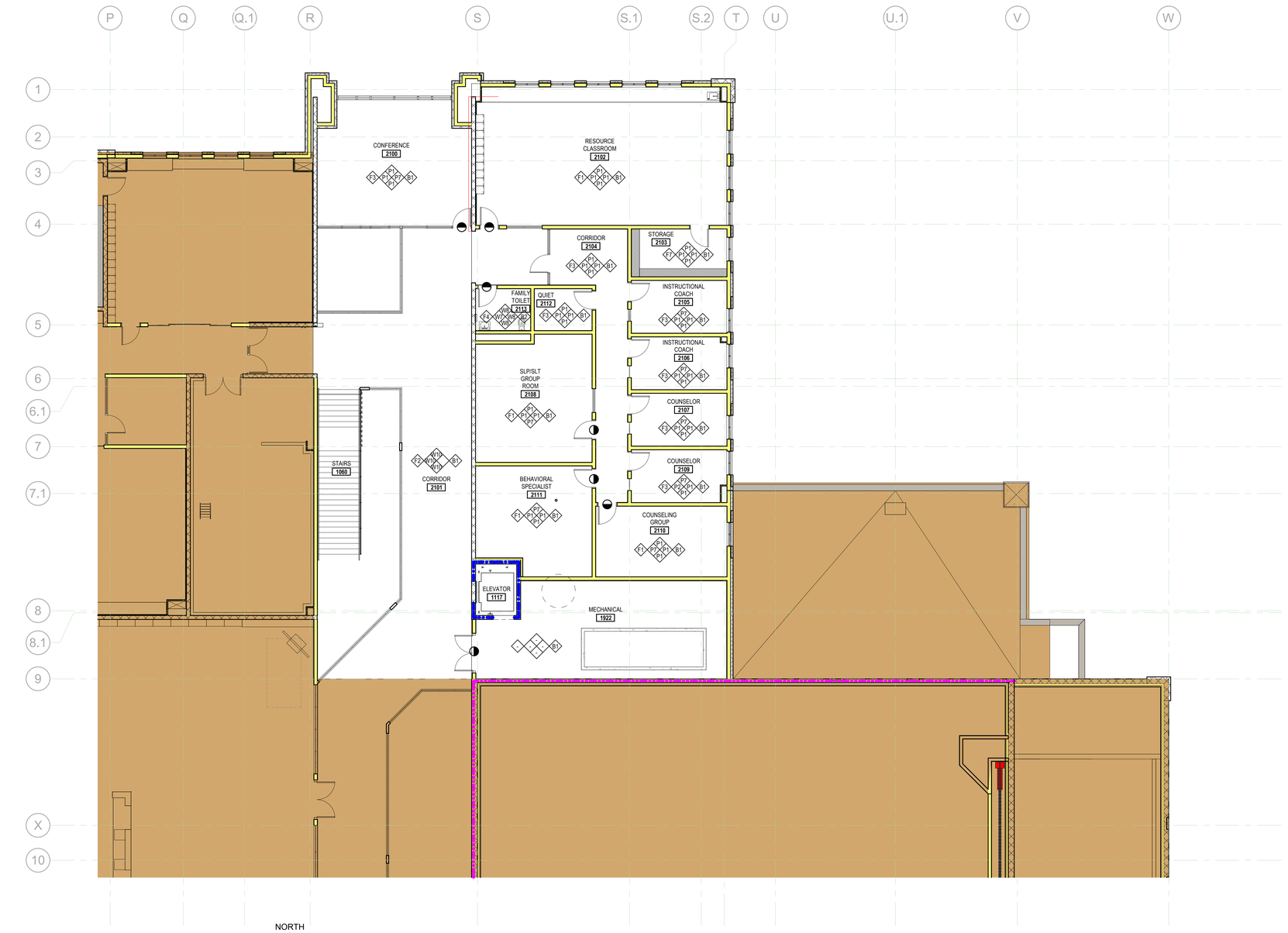


A1 AREA 21 FINISH PLAN

SCALE: 1/8" = 1'-0"

NORTH

FINISH PLAN SYMBOLS

WALL / FLOOR — C - R - B — WALL / BASE

WALL — NOTE — WALL

◇ SINGLE FINISH SYMBOLS INDICATE WHERE FINISHES ARE DIFFERENT FROM GENERAL ROOM FINISHES, OR PROVIDE ADDITIONAL FINISH INFORMATION

CHANGE AT FLOOR MATERIAL

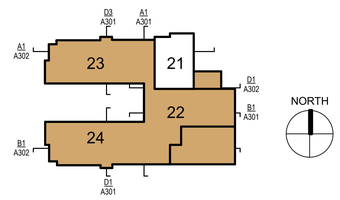
IN ANY SPACE WHERE FINISHES ARE NOT DESIGNATED, ASSUME THE FOLLOWING FINISHES:

B2 4" RUBBER BASE
F1 CARPET TILES - GENERAL FIELD - LAID IN LINEAR BRICK PATTERN
W1: PRIMED & PAINTED WALL - GENERAL COLOR - EPOXY PAINT IN WE/DAMP AREAS
W3: SEALED CMU WHERE CMU IS PRESENT

GENERAL FINISH NOTES

1. PROVIDE EPOXY PAINT AT ALL RESTROOMS, SHOWERS, LOCKER ROOMS AND JANITOR CLOSETS.
2. ALL PAINTED STEEL BRACING AND COLUMNS TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. AT SOFFITS RECEIVING COLOR - PAINT ALL SIDES OF SOFFIT.
4. ALL METAL GUARDRAILS AND STAIR STRINGERS TO BE PAINTED SEE FINISH SCHEDULE FOR H.M. DOOR AND FRAME PAINT COLORS.
5. ALL EXPOSED CEILINGS TO BE PAINTED. REFER TO REFLECTED CEILING PLANS.
6. ALL FLOOR TRANSITIONS TO BE LOCATED AT CENTER OF DOOR, U.N.O. ALL FLOOR TRANSITIONS AT FLOOR TILE (T1) LOCATIONS TO BE LOCATED AT INSIDE CORNER OF DOOR.
7. PROVIDE FLOOR FINISH 'RT: RUBBER STAIR TREAD' AT STAIR TREADS AND LANDING.
8. PROVIDE A SMOOTH TRANSITION AT ALL FLOOR MATERIALS - CONTRACTOR TO INSTALL ALL FLOOR FINISHES AT SAME LEVEL, DESPITE DIFFERENT THICKNESS. PROVIDE FLOOR TRANSITION WHERE OCCURS.
9. SEE SHEET AXXX FOR FLOORING TRANSITION DETAILS.
10. SEE ELEVATION SHEETS FOR ALL WALL TILE PATTERNS.
11. PROVIDE TILE 4"X4" CERAMIC WALL TILE AT ALL JANITOR SINKS UNLESS NOTED OTHERWISE. PROVIDE TILE BULLNOSE TO FINISH OFF ALL EXPOSED EDGES.
12. ALL WALLS RECEIVING TILE WAINSCOT TO RECEIVE PAINT P1 ABOVE, U.N.O. SEE FINISH PLANS FOR ACCENT WALL LOCATIONS.
13. ALL GROUT JOINTS TO BE NO LARGER THAN 1/8".
14. PROVIDE 'CG: CORNER GUARD' AT ALL LOCATIONS WHERE TILE WAINSCOT WRAPS GYP. BD. CORNERS. CAP ALL TILE WAINSCOT WITH SCHLUTER STRIP (SL).
15. AT ALL TILE WAINSCOT, SCRIBE BOTTOM TILE TO MATCH FINISH FLOOR SURFACE AND CAULK WITH BASE 'NB'.
16. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF MILLWORK.
17. COORDINATE ALL MILLWORK WITH APPLIANCES BEFORE FABRICATION.
18. ALL COUNTERTOP, BACKSPLASHES, AND EDGE BANDING TO HAVE COORDINATING FINISHES.
19. ALL WOOD TRIM TO BE STAINED TO MATCH DOOR STAIN.

KEY PLAN - UPPER LEVEL



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DATE: NOVEMBER 08 2023

STATE OF UTAH — REGISTERED — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 21 ENLARGED FINISH PLAN - LEVEL 02

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HEADER SCHEDULE

H1	GYP. HEADER
H2	MASONRY HEADER

GENERAL CEILING NOTES

1. REFER TO DETAIL **C6/A530** FOR TYPICAL CEILING SUSPENSION & SEISMIC BRACING
2. REFER TO DETAIL **A6/A530** FOR TYPICAL SUSPENDED GYP. BOARD CEILINGS
3. ALL UNIDENTIFIED CEILING TYPES ON THE PLANS SHALL BE TYPE " A" AT 9'-4" A.F.F.
4. GRID SUSPENSION SYSTEMS SHALL BE CENTERED WITHIN AREAS INDICATED, UNLESS NOTED OTHERWISE
5. PAINT ALL EXPOSED STRUCTURE, MECHANICAL, DUCTS, ELECTRICAL WORK, PIPING, ETC. ALL VISIBLE ELEMENTS TO BE PAINTED AT TYPE "E" & TYPE "F" (ABOVE VENTWOOD)
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF MECHANICAL GRILLES, AND TO MECHANICAL DRAWINGS FOR QUANTITIES AND TYPES
7. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF LIGHT FIXTURES AND TO ELECTRICAL DRAWINGS FOR QUANTITY AND TYPES
8. MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE WORK WITH SPRINKLER CONTRACTOR TO AVOID CONFLICTS IN FIELD
9. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
10. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED.
11. HEADER HEIGHTS TO BE 9'-0" UNO.
12. CEILING TILE SHALL BE LISTED & TESTED ASTM E 84 & HAVE A FLAME SPREAD OF 0-25 & A SMOKE INDEX OF 0-450. IF THE CEIING TILE IS A COMPONENT PART OF A PLENUM SYSTEM THEN IT SHALL BE LISTED & TESTED PER ASTM E 84 & HAVE A FLAME SPREAD F 0-25 & A SMOKE INDEX OF 0-50.

CEILING LEGEND

- A - SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
- B - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING
- C - SUSPENDED 5/8" GYP. BD. CEILING SYSTEM - PAINTED (EPOXY PAINT AT WET LOCATIONS)
- D - SUSPENDED 5/8" GYP. CEILING SYSTEM (2 LAYERS) , PAINTED - 1 HOUR RATED
- E - OPEN TO STRUCTURE ABOVE
- F - SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH HOLD DOWN CLIPS
- G - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING (VINYL COATED)
- H - SUSPENDED WOOD PANEL CEILING SYSTEM
- I - EXTERIOR METAL SOFFIT SYSTEM. APPLY 3" CLOSED CELL SPRAY FOAM INSULATION ON UNDERSIDE OF DECK, WHERE OCCURS.
- J - SPRAY APPLIED ACOUSTICAL TREATMENT ON METAL DECK, WHITE - PAINT ALL BUILDING STRUCTURE, OVERHEAD MEP, ETC TO MATCH INSULATION COLOR

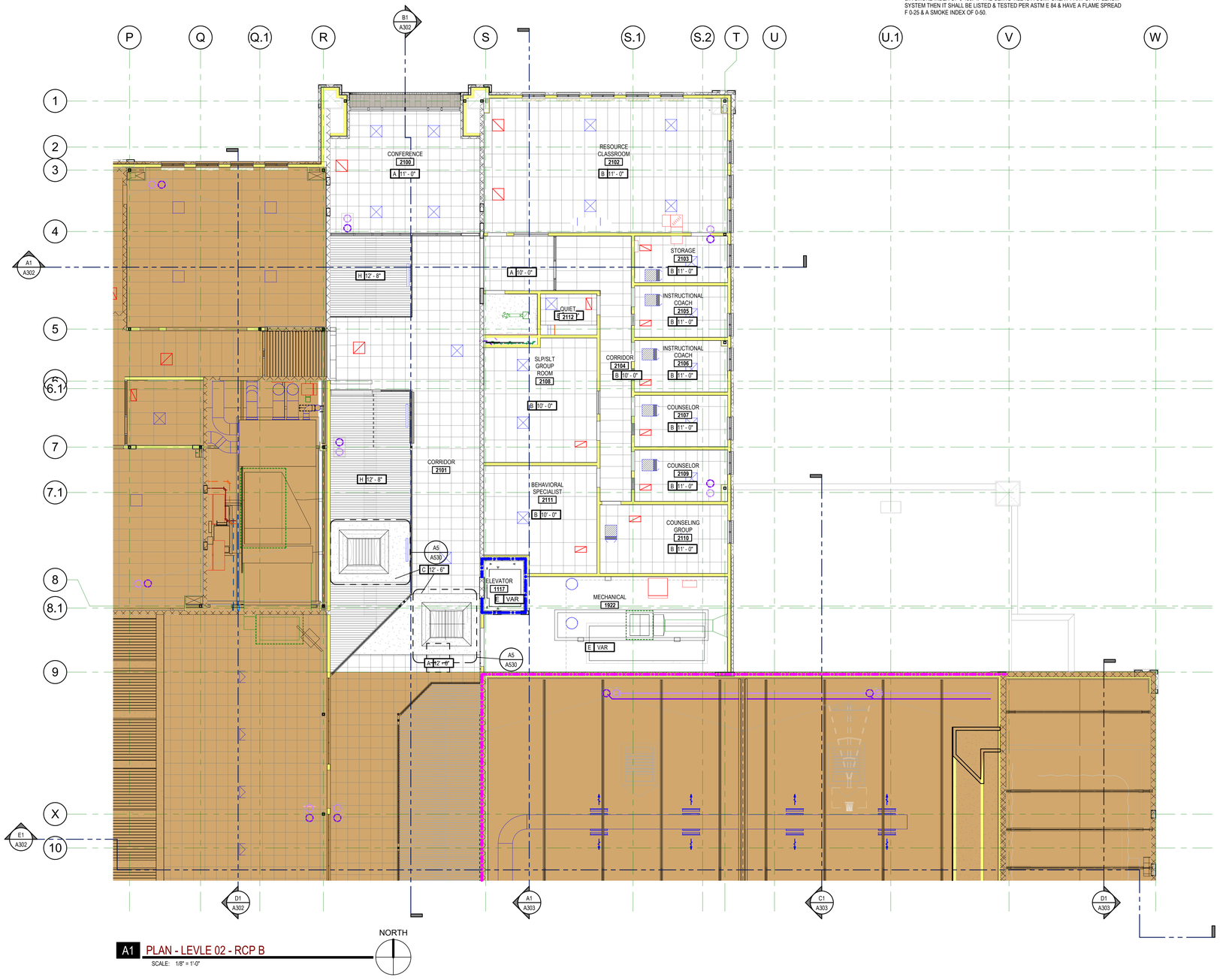
CEILING SYMBOLS

ELECTRICAL

- 2'X4' FLUORESCENT FIXTURE
- 2'X2' FLUORESCENT FIXTURE
- 1'X4' FLUORESCENT FIXTURE
- FLUORESCENT STRIP FIXTURE
- RECESSED DOWN LIGHT
- WALL WASH
- 1'X4' FLUORESCENT FIXTURE
- PENDANT LIGHT FIXTURE
- EXIT SIGN, SINGLE-SIDED
- EXIT SIGN, DOUBLE-SIDED
- FIRE ALARM
- SPEAKER
- SMOKE DETECTOR
- WIRELESS INTERNET

MECHANICAL

- SUPPLY GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- SPRINKLER HEAD - CEILING MOUNT
- SPRINKLER HEAD - WALL MOUNT



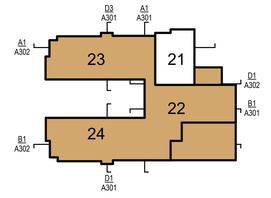
A1 PLAN - LEVLE 02 - RCP B

SCALE: 1/8" = 1'-0"

NORTH

KEYED NOTES

KEY PLAN - UPPER LEVEL



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STATE OF UTAH — BRENT C. SHEERAN — 7067869 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

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BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 21 ENLARGED REFLECTED CEILING PLAN - LEVEL 02

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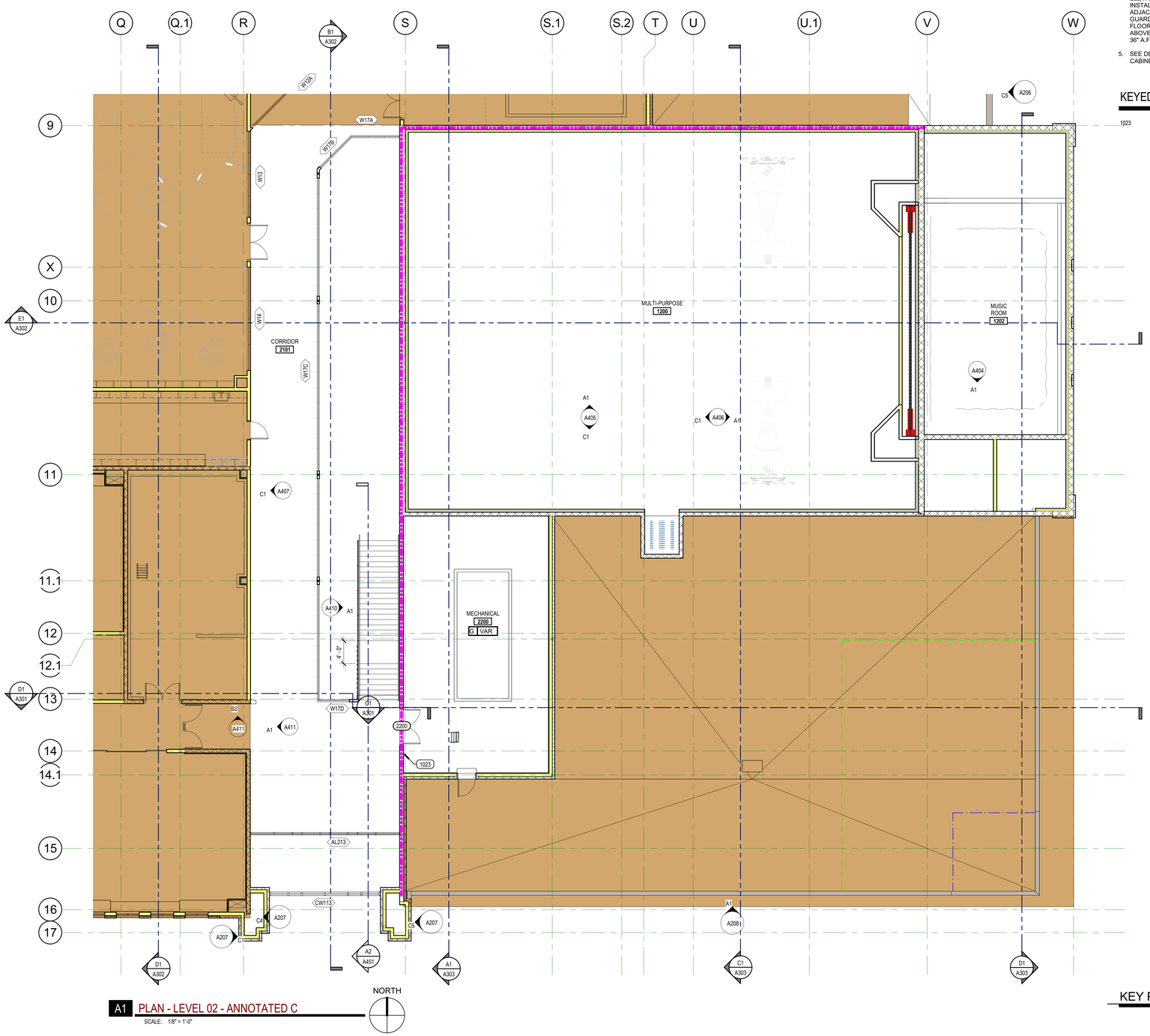


A1 PLAN - LEVEL 02 - ANNOTATED C

SCALE: 1/8" = 1'-0"

NORTH

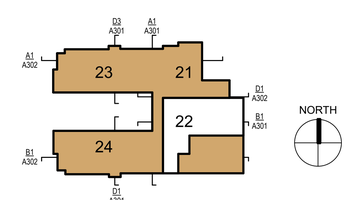
PLAN NOTES

1. WHERE FLOOR DRAINS ARE INSTALLED THE FLOOR IS TO SLOPE TO THE DRAIN. THE MAXIMUM SLOPE IS NOT TO EXCEED 2% WHILE THE MINIMUM SLOPE IS NOT TO BE LESS THAN 1%.
2. WHERE CONCRETE PADS ARE CALLED TO BE CONSTRUCTED UNDER EQUIPMENT THE SLAB IS TO BE 8" THICK, U.N.O., AND IS TO HAVE #4 BARS AT 18" O.C. EACH WAY. COORDINATE DIMENSIONS OF PAD WITH ACTUAL EQUIPMENT SPEC
3. SEE SHEET **A880** FOR TYPICAL FLOORING TRANSITION DETAILS.
4. THE CONTRACTOR IS TO ENSURE THAT BETWEEN ANY FINISH FLOOR ELEVATION TO 36" A.F.F. ALL GUARDRAILS ARE TO BE CONSTRUCTED AND INSTALLED SO THAT A 4 3/8" SPHERE WILL NOT PASS BETWEEN ANY TWO ADJACENT GUARDRAIL COMPONENTS OR BETWEEN THE EDGE OF A GUARDRAIL AND ALL ADJACENT BUILDING ELEMENT SUCH AS A WALL OR FLOOR. AN 4 3/8" DIAMETER SPHERE IS NOT TO PASS BETWEEN THE ABOVE MENTIONED COMPONENTS AND ELEMENTS FROM AN ELEVATION 36" A.F.F. AND HIGHER.
5. SEE DETAIL **XX** AND **XX** ON SHEET **AXXX** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

KEYED NOTES

1023 FIRE EXTINGUISHER, TYPE K, WALL MOUNTED

KEY PLAN - UPPER LEVEL



PARTITION + FRAMING GENERAL NOTES

FRAMED WALL PARTITIONS

1. PARTITION TYPE INDICATIONS ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH SHEETS AND INTERIOR ELEVATIONS FOR WALL FINISHES INCLUDING TILE COURSING AND LAYOUT AND/OR THE DESIGNATIONS ON THE PLANS FOR ADDITIONAL INFORMATION REGARDING APPLIED FINISHES.
2. WHERE PARTITION TYPE DESIGNATION ON FLOOR PLANS IS INTERRUPTED BY DOOR OPENING, GLAZED PARTITION, ETC., CONSTRUCTION ABOVE INTERRUPTION (AND WHERE APPLICABLE BELOW) IS TO BE THE SAME AS THAT DESIGNATED FOR THE PARTITION IN WHICH THE INTERRUPTION OCCURRED.
3. THE MINIMUM REQUIREMENTS FOR CONSTRUCTION OF EACH PARTITION TYPE AS EXPRESSED BY THE INDICATED REFERENCE ARE INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THE WORK OF THIS PROJECT. HOWEVER, ADDITIONAL AND/OR MORE RESTRICTIVE REQUIREMENTS MAY BE INDICATED BY THE SPECIFICATIONS AND DRAWINGS. SUCH REQUIREMENTS ALSO APPLY AND SHALL GOVERN. SUCH REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   a. USE 5/8" THICK GYPSUM BOARD THROUGHOUT UNLESS NOTED OTHERWISE.
   b. USE 16" OC MAX STUD SPACING UNLESS NOTED OTHERWISE IN THESE DOCUMENTS. THE SPACING STATED BY THE REFERENCED APPROVAL OR EST REPORT IS THE MAX SPACING IF ALLOWED IN THESE DOCUMENTS.
   c. USE STUDS OF GAUGE INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. THE GAUGE STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM GAUGE TESTED, 20 GA (30 MILS) IS THE MINIMUM ALLOWED IN THESE DOCUMENTS.
4. USE STUDS OF DEPTH INDICATED BY THIS SET OF DOCUMENTS. THE DEPTH STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM DEPTH TESTED DEPTH ALLOWED IN THESE DOCUMENTS. SEE STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CONSTRUCTION OF CONCRETE, MASONRY AND STUD WALLS
5. PROVIDE FIRE RATED CONSTRUCTION ASSEMBLIES WHERE INDICATED ON SHEETS G100's AND FLOOR PLAN DRAWINGS.
6. ALL DIMENSIONS ARE CENTER OF STUD OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. FACE OF STUD WILL BE NOTED AS FOS AND FACE OF FINISHED WALL WILL BE NOTED AS FOW.
7. AT ALL INTERIOR WALLS, STUDS, INSULATION AND GYPSUM BOARD ARE TO EXTEND TO THE DECK ABOVE. UNLESS NOTED OTHERWISE.
8. WALL TYPES NOT NOTED ARE ASSUMED TO MATCH ADJACENT ROOMS. SEE SHEETS FOR FINISHES, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. ALL METAL STUD PARTITIONS ARE CONSIDERED ACOUSTIC PARTITIONS AND ARE TO RECEIVE A TYPE 1 SOUND ATTENUATION BLANKET. THICKNESS TO MATCH STUD DEPTH, UNLESS NOTED OTHERWISE.
10. REFER TO SHEET **A520** FOR TYPICAL INTERIOR WALL CONDITIONS ASSOCIATED WITH ALL METAL STUD PARTITIONS.
11. PROVIDE CONTROL JOINTS IN METAL FRAMED WALLS AT APPROXIMATELY 30 FEET ON CENTER. LOCATE AT CORNER ABOVE DOORS OR INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. **CONSULT WITH ARCHITECT PRIOR TO COMMENCING FRAMING.** INSTALL PER DETAILS **C2 AND C3/ A520** FOR CONTROL JOINTS.
12. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., GYPSUM BOARD IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM. THE OPENING FOR DUCTS OR LARGE PENETRATIONS SHALL BE FRAMED WITH A HEADER, ADD AN ANGLED CORNER BRACE IF THE GAP EXCEEDS 3" FROM FRAMING TO THE OPENING.
13. PROVIDE BLOCKING / BACKING FOR ALL WALL MOUNTED EQUIPMENT. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR CABINETS, GRAB BARS ETC. INSTALL BLOCKING AS DETAILED OR AS REQUIRED TO MOUNT SUCH DEVICES. ALL BLOCKING IS TO BE FIRE RETARDANT TREATED. INSTALL PER SHEET **A520**
14. **WHERE THERE IS LIMITED WATER EXPOSURE:** INSTALL ONE LAYER OF 5/8" TYPE X WATER RESISTANT GYPSUM BOARD PER ASTM C1396 (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION AT THE FOLLOWING LOCATIONS:
   a. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITORS SINKS
   b. AT OTHER LOCATIONS, I.E. TOILET ROOMS AND KITCHENS, AND AS INDICATED ON THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
15. INSTALL ONE LAYER OF 5/8" GLASS MAT TILE BACKER BOARD IN LIEU OF GYPSUM BOARD (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION WHERE THERE IS NO FIRE RATING AND OVER GYPSUM BOARD FACE LAYER AT FIRE RATED PARTITIONS AT THE FOLLOWING LOCATIONS.
16. AT WET LOCATIONS, SUCH AS SHOWER STALLS AND TUB SURROUNDS.
   a. WHERE CERAMIC TILE FINISHES ARE INDICATED PER THE FINISH PLANS AND/OR INTERIOR ELEVATIONS.
   b. AT OTHER LOCATIONS AS INDICATED BY THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
17. WHERE NEW WALLS OR FURRING ARE INDICATED TO BE DIMENSIONED OFF OF AN EXISTING WALL, THE NEW WALL SHALL BE STRAIGHT AND PLUMB REGARDLESS OF THE CONDITION OF THE EXISTING WALL.
18. ALL EXTERIOR STUD WALLS TO HAVE CONTINUOUS INSULATION, VAPOR BARRIER AND AIR INFILTRATION BARRIER FOR THE FULL HEIGHT AND LENGTH OF THE WALL,SEAL ALL PENETRATIONS. SEE DETAILS ON SHEET **A520** FOR TYPICAL TOP OF WALL CONDITION
19. THE AIR INFILTRATION BARRIER IS TO WRAP INTO ALL WINDOW AND DOOR OPENINGS.
20. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

MASONRY OR CONCRETE WALLS

1. SEE STRUCTURAL PLANS FOR ADDITIONAL CONCRETE AND MASONRY WALL INFORMATION.
2. SEE EXTERIOR ELEVATIONS FOR COURSING, MASONRY TYPES AND METAL PANEL ORIENTATION PER **EXTERIOR ELEVATION SHEETS.**
3. ALL MASONRY WALLS ARE TO BE REINFORCED AND ARE TO BE SET ON REINFORCED FOOTINGS. SEE THE **EXTERIOR ELEVATION SHEETS** FOR LOCATION OF CONTROL JOINTS. WHERE NOT NOTED, CONTROL JOINTS TO BE LOCATED AS PER THE REQUIREMENTS FOUND IN THE STRUCTURAL DOCUMENTS BUT ARE NOT TO EXCEED 30' OC. SEE THE STRUCTURAL DRAWINGS FOR REINFORCING AND OTHER DETAILS PERTAINING TO MASONRY WALLS. IF NOT OTHERWISE NOTED, LOCATE CONTROL JOINTS AT CORNER ABOVE DOORS, INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. CONSULT WITH ARCHITECT PRIOR TO INSTALLING PER DETAIL **C1/ A520**
4. SEE IBC 2021, CHAPTER 7 FOR FIRE RESISTIVE REQUIREMENTS ON NEW CONCRETE AND CONCRETE MASONRY UNIT WALLS.
   - CMU WALLS (IBC TABLE 721.1(2), ITEM 3)
   - CAST IN PLACE CONCRETE WALLS (IBC TABLE 722.2.1.1)
5. REFER TO DETAIL SHEET **A520** FOR TYPICAL WALL CONDITIONS ASSOCIATED WITH ALL AND MASONRY PARTITIONS.
6. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., MASONRY IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM.
7. **PROTECTION OF MASONRY:** DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAYS WORK, EXCEPT WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO REMAIN ABOVE 65 DEG F AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS. (THIS IS TO PREVENT CONDENSATION FROM COVERED WALLS CAUSING A MOISTURE PROBLEM.) COVER PARTIALLY COMPLETED MASONRY EACH DAY THAT CONSTRUCTION IS NOT IN PROGRESS. WALLS ARE TO BE PROTECTED UNTIL THEY ARE PERMANENTLY PROTECTED BY THE ROOFING MEMBRANE OVER THE CAP PLATE. THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY PROTECTION IMMEDIATELY FOLLOWING THE TOPPING OUT OF EACH SECTION OF WALL BY INSTALLING WATERPROOF SHEETING OVER A CONTINUOUS CAP PLATE UNTIL THE ROOFING MEMBRANE IS INSTALLED. **A SOLID GROUTED TOP BOND BEAM SHALL NOT BE CONSIDERED ADEQUATE PROTECTION FOR THE WALL.**
8. IT IS ACCEPTABLE TO PLACE NON-INTEGRAL COLORED CMU IN PORTIONS OF WALLS INDICATED TO BE CONSTRUCTED OF INTEGRAL COLOR CMU IF THE DOCUMENTS SHOW THESE PORTIONS OF WALL PAINTED OR COVERED WITH TILE, STUD FURRING, ABOVE CEILINGS OR UNDER ROOFING MEMBRANE. IT IS NOT ACCEPTABLE TO UTILIZE NON INTEGRAL COLORED CMU BEHIND CABINETS, FURNISHINGS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CLIMBING WALLS AND LOCKERS.
9. AT ALL SPLIT FACE AND PAINTED CMU THE HORIZONTAL AND VERTICAL MORTAR JOINTS ARE TO BE CONCAVE. AT ALL HONED BLOCK THE HORIZONTAL MORTAR JOINT IS TO BE A WEATHERED JOINT AND ALL VERTICAL JOINTS ARE TO BE RAKED.
10. PROVIDE A 3/4" CHAMFER ALL INTERIOR EXPOSED VERTICAL MASONRY CORNERS FROM 8' AFF TO BOTTOM OF MASONRY LINTEL OR IF NO LINTEL EXISTS, STOP CHAMFER @ FIRST MASONRY JOINT BELOW CEILING. NOTE THAT THIS CHAMFER IS NOT TO BE PROVIDED AT CORNERS SHOWN IN THESE DOCUMENTS AS COVERED WITH WALL TILE. SEE DETAIL
11. **PROVIDE SPECIAL SHAPES**, SUCH AS "U" SHAPED CHANNEL FOR LINTELS OR HEADERS AND CAPPING UNITS FOR SASH AND OTHER SPECIAL CONDITIONS.
12. WHERE SPLIT FACE BLOCK IS SHOWN EXTENDING TO THE TOP OF A PARAPET, PROVIDE AN INTEGRAL COLOR SMOOTH FACE BLOCK AT THE TOP COURSE TO ALLOW THE CAP FLASHING TO FIT TIGHT AGAINST THE WALL.
13. CONTRACTOR TO COORDINATE AND PROVIDE SMOOTH MASONRY AT ALL FLASHING, REGLETS, GUTTERS, EDGES OF CEILING AND BASE AND OTHER ITEMS REQUIRING A SMOOTH FINISH THAT ARE HIDDEN.

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
SHERYL L. KONG
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 22 ENLARGED ANNOTATED PLAN - LEVEL 02

A122.1

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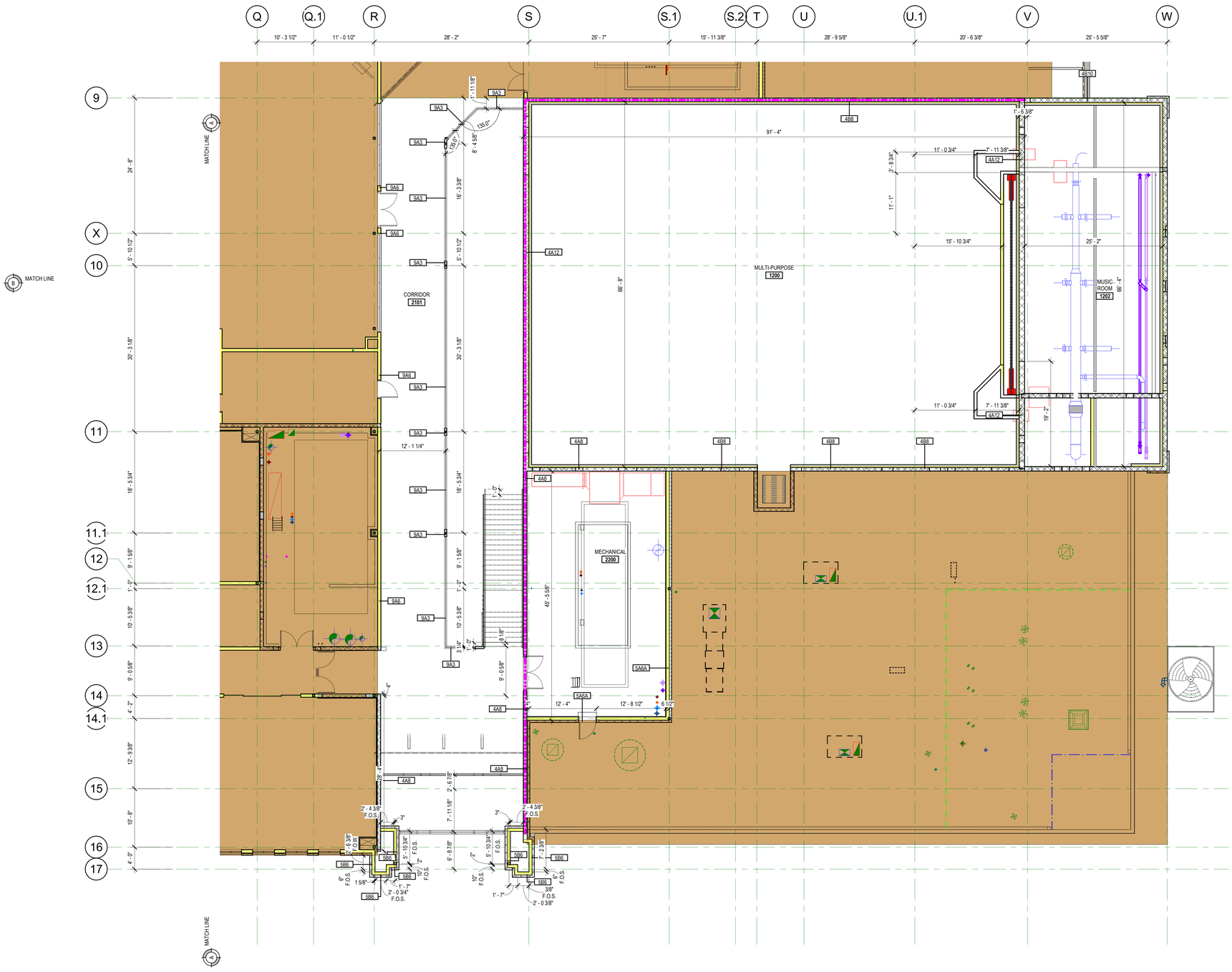


A1 PLAN - LEVEL 02 - DIMENSION + WALL TYPE

SCALE: 1/8" = 1'-0"

NORTH

DIMENSION NOTES

1. ALL DIMENSIONS ARE TO CENTER OF STUD WALL OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. WHERE THE END OF A WALL IS INDICATED THE DIMENSION IS TO THE FINISH SURFACE OF THE WALL END.
2. UNLESS DIMENSIONED OTHERWISE, THE DIMENSION FROM THE BUCK OF A DOOR FRAME IS TO BE 4" TO THE WALL CORNER.
3. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN, DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED.
4. SMOKE AND FIRE RATED WALLS SHALL PERMANENTLY BE IDENTIFIED WITH SIGNS OR STENCILING IN THE CONCEALED SPACE. SUCH IDENTIFICATION SHALL BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8-INCH STROKE IN A CONTRASTING COLOR INCORPORATING THE WORDING, "FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS"

KEY FOR PARTITION TYPES

SEE SHEET A500 FOR WALL TYPE DETAILS AND NOTES

DENOTES TYPE OF CONSTRUCTION (SPEC. DIVISION) — WALL

4A8

3X 0 SERIES CONCRETE
4X 0 SERIES MASONRY
5X 0 SERIES COLD FORMED METAL STUDS, 16 GA MIN.
9X 0 SERIES METAL STUDS

NOMINAL SIZES: V = VARIABLE/MATCHEXISTING
1 = 1 5/8" STUDS
2 = 2 1/2" STUDS
3 = 3 5/8" STUDS
4 = 4" STUDS / 4" (NOM.) C.M.U.
6 = 6" STUDS / 6" (NOM.) C.M.U.
8 = 8" STUDS / 8" (NOM.) C.M.U.
10 = 10" (NOM.) C.M.U. OR CONC.
12 = 12" (NOM.) C.M.U. OR CONC.

MATCH LINE

EXAMPLE: WALL TYPE 9A3 IS A 3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD ON BOTH SIDES.

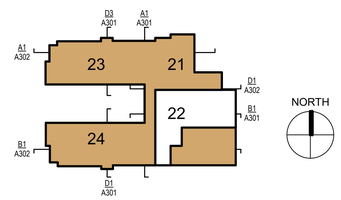
RATED WALL LEGEND

- INCIDENTAL USE AREAS
- 1 HOUR SEPARATION
- 2 HOUR SEPARATION
- 3 HOUR SEPARATION

EXAMPLE: WALL TYPE 9A3-1 IS A ONE HOUR RATED, 3 5/8" METAL STUD WALL WITH 5/8" GYPSUM BOARD ON BOTH SIDES, PER ASSEMBLY REQUIREMENTS.

90X-R SERIES
FIRE RATING (ONLY WHEN NOTED): 1 = 1 HOUR RATED ASSEMBLY
2 = 2 HOUR RATED ASSEMBLY
3 = 3 HOUR RATED ASSEMBLY

KEY PLAN - UPPER LEVEL



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STATE OF UTAH
BRENT M. WILSON
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 22 ENLARGED
DIMENSION + WALL TYPE
PLAN - LEVEL 02

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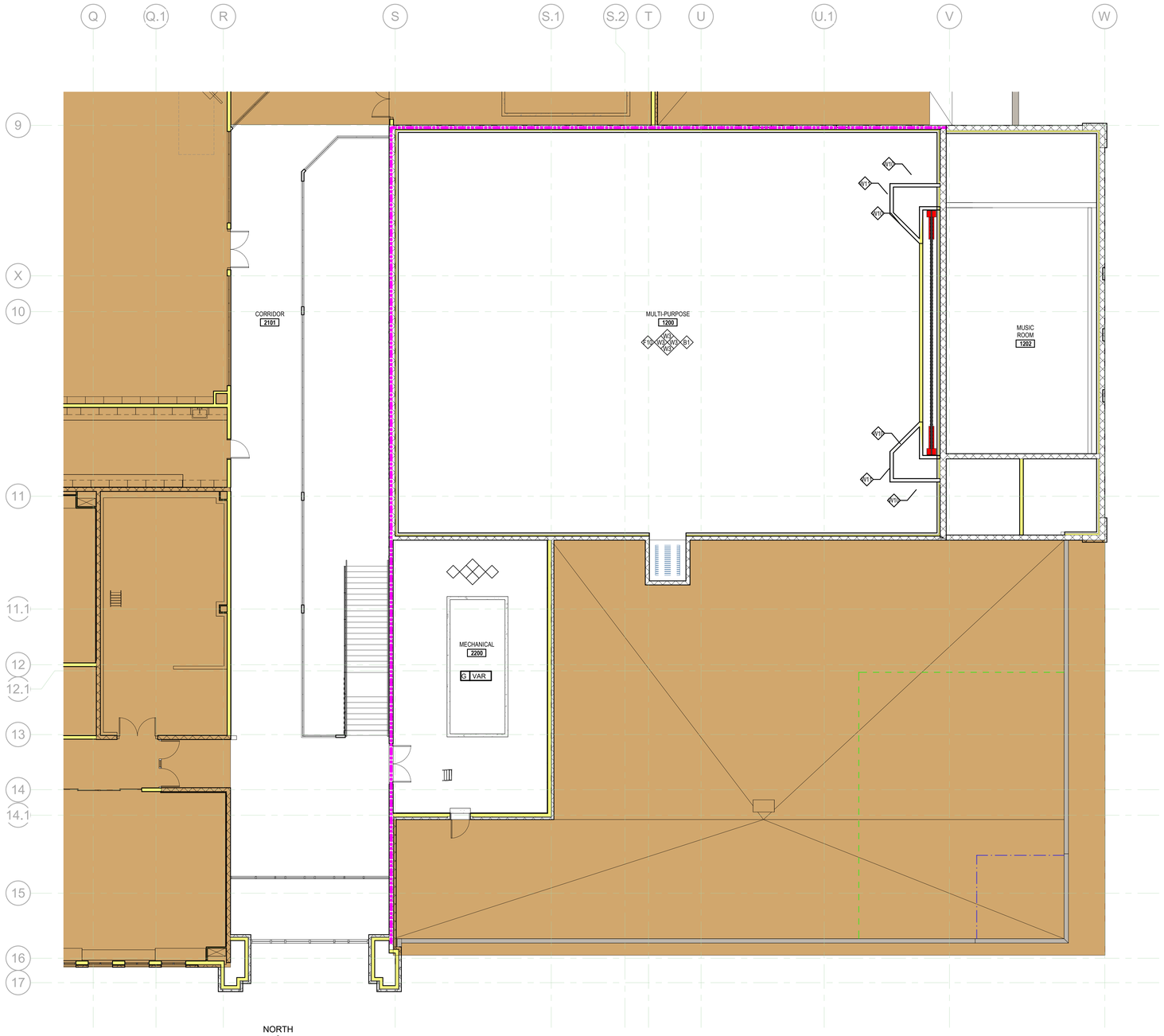


A1 AREA 22 FINISH PLAN

SCALE: 1/8" = 1'-0"

NORTH

FINISH PLAN SYMBOLS

WALL / FLOOR — C - R - B — WALL / BASE

WALL — NOTE — WALL

SINGLE FINISH SYMBOLS INDICATE WHERE FINISHES ARE DIFFERENT FROM GENERAL ROOM FINISHES, OR PROVIDE ADDITIONAL FINISH INFORMATION

CHANGE AT FLOOR MATERIAL

IN ANY SPACE WHERE FINISHES ARE NOT DESIGNATED, ASSUME THE FOLLOWING FINISHES:

B2 4" RUBBER BASE
F1 CARPET TILES - GENERAL FIELD - LAID IN LINEAR BRICK PATTERN
W1: PRIMED & PAINTED WALL - GENERAL COLOR - EPOXY PAINT IN WE/DAMP AREAS
W3: SEALED CMU WHERE CMU IS PRESENT

GENERAL FINISH NOTES

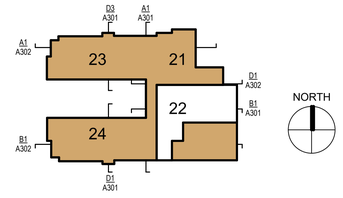
1. PROVIDE EPOXY PAINT AT ALL RESTROOMS, SHOWERS, LOCKER ROOMS AND JANITOR CLOSETS.
2. ALL PAINTED STEEL BRACING AND COLUMNS TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. AT SOFFITS RECEIVING COLOR - PAINT ALL SIDES OF SOFFIT.
4. ALL METAL GUARDRAILS AND STAIR STRINGERS TO BE PAINTED SEE FINISH SCHEDULE FOR H.M. DOOR AND FRAME PAINT COLORS.
5. ALL EXPOSED CEILINGS TO BE PAINTED. REFER TO REFLECTED CEILING PLANS.
6. ALL FLOOR TRANSITIONS TO BE LOCATED AT CENTER OF DOOR, U.N.O. ALL FLOOR TRANSITIONS AT FLOOR TILE (T1) LOCATIONS TO BE LOCATED AT INSIDE CORNER OF DOOR.
7. PROVIDE FLOOR FINISH 'RT': RUBBER STAIR TREAD' AT STAIR TREADS AND LANDING.
8. PROVIDE A SMOOTH TRANSITION AT ALL FLOOR MATERIALS - CONTRACTOR TO INSTALL ALL FLOOR FINISHES AT SAME LEVEL, DESPITE DIFFERENT THICKNESS. PROVIDE FLOOR TRANSITION WHERE OCCURS.
9. SEE SHEET AXXX FOR FLOORING TRANSITION DETAILS.
10. SEE ELEVATION SHEETS FOR ALL WALL TILE PATTERNS.
11. PROVIDE TILE 4"X4" CERAMIC WALL TILE AT ALL JANITOR SINKS UNLESS NOTED OTHERWISE. PROVIDE TILE BULLNOSE TO FINISH OFF ALL EXPOSED EDGES.
12. ALL WALLS RECEIVING TILE WAINSCOT TO RECEIVE PAINT P1 ABOVE, U.N.O. SEE FINISH PLANS FOR ACCENT WALL LOCATIONS.
13. ALL GROUT JOINTS TO BE NO LARGER THAN 1/8".
14. PROVIDE 'CG: CORNER GUARD' AT ALL LOCATIONS WHERE TILE WAINSCOT WRAPS GYP. BD. CORNERS. CAP ALL TILE WAINSCOT WITH SCHLUTER STRIP (SL).
15. AT ALL TILE WAINSCOT, SCRIBE BOTTOM TILE TO MATCH FINISH FLOOR SURFACE AND CAULK WITH BASE 'RB'.
16. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF MILLWORK.
17. COORDINATE ALL MILLWORK WITH APPLIANCES BEFORE FABRICATION.
18. ALL COUNTERTOP, BACKSPLASHES, AND EDGE BANDING TO HAVE COORDINATING FINISHES.
19. ALL WOOD TRIM TO BE STAINED TO MATCH DOOR STAIN.

DIFFUSER FINISH LEGEND

- (A) P1 (GENERAL PAINT) -GYP. BD. ABOVE TO MATCH WALL FINISH.
- (B) P2 (ACCENT PAINT) -GYP. BD. ABOVE TO MATCH WALL FINISH.
- (C) P3 (SEALED CMU) -GYP. BD. ABOVE TO MATCH DIFFUSER FINISH.
- (D) (PAINT TO MATCH 24" PORCELAIN CERAMIC TILE) -GYP. BD. ABOVE TO MATCH WALL FINISH.
- (E) PAINT TO MATCH 4"X4" CERAMIC TILE
- (F) PAINT PANEL RADIATOR - COLORS SELECTED BY ARCHITECT

NOTE: CONTRACTOR TO COORD. THERMAL DISPLACEMENT DIFFUSER (TDD) FINISH W/ FINISH PLANS. SUBMIT PLAN SHOWING LOCATION AND INDICATING FINISHES OF ALL TDDS. IF NO FINISH IS SPECIFIED ASSUME TYPE "A"

KEY PLAN - UPPER LEVEL



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STATE OF UTAH — BRENT SHEARER — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 22 ENLARGED FINISH PLAN - LEVEL 02

A122.3

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HEADER SCHEDULE

H1	GYP. HEADER
H2	MASONRY HEADER

GENERAL CEILING NOTES

1. REFER TO DETAIL **C6/A530** FOR TYPICAL CEILING SUSPENSION & SEISMIC BRACING
2. REFER TO DETAIL **A6/A530** FOR TYPICAL SUSPENDED GYP. BOARD CEILINGS
3. ALL UNIDENTIFIED CEILING TYPES ON THE PLANS SHALL BE TYPE " A" AT 9'-4" A.F.F.
4. GRID SUSPENSION SYSTEMS SHALL BE CENTERED WITHIN AREAS INDICATED, UNLESS NOTED OTHERWISE
5. PAINT ALL EXPOSED STRUCTURE, MECHANICAL, DUCTS, ELECTRICAL WORK, PIPING, ETC. ALL VISIBLE ELEMENTS TO BE PAINTED AT TYPE "E" & TYPE "F" (ABOVE VENTWOOD)
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF MECHANICAL GRILLES, AND TO MECHANICAL DRAWINGS FOR QUANTITIES AND TYPES
7. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF LIGHT FIXTURES AND TO ELECTRICAL DRAWINGS FOR QUANTITY AND TYPES
8. MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE WORK WITH SPRINKLER CONTRACTOR TO AVOID CONFLICTS IN FIELD
9. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
10. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED.
11. HEADER HEIGHTS TO BE 9'-0" UNO.
12. CEILING TILE SHALL BE LISTED & TESTED ASTM E 84 & HAVE A FLAME SPREAD OF 0-25 & A SMOKE INDEX OF 0-450. IF THE CEIING TILE IS A COMPONENT PART OF A PLENUM SYSTEM THEN IT SHALL BE LISTED & TESTED PER ASTM E 84 & HAVE A FLAME SPREAD F 0-25 & A SMOKE INDEX OF 0-50.

CEILING LEGEND

- A - SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
- B - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING
- C - SUSPENDED 5/8" GYP. BD. CEILING SYSTEM - PAINTED (EPOXY PAINT AT WET LOCATIONS)
- D - SUSPENDED 5/8" GYP. CEILING SYSTEM (2 LAYERS) , PAINTED - 1 HOUR RATED
- E - OPEN TO STRUCTURE ABOVE
- F - SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH HOLD DOWN CLIPS
- G - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING (VINYL COATED)
- H - SUSPENDED WOOD PANEL CEILING SYSTEM
- I - EXTERIOR METAL SOFFIT SYSTEM. APPLY 3" CLOSED CELL SPRAY FOAM INSULATION ON UNDERSIDE OF DECK, WHERE OCCURS.
- J - SPRAY APPLIED ACOUSTICAL TREATMENT ON METAL DECK, WHITE - PAINT ALL BUILDING STRUCTURE, OVERHEAD MEP, ETC TO MATCH INSULATION COLOR

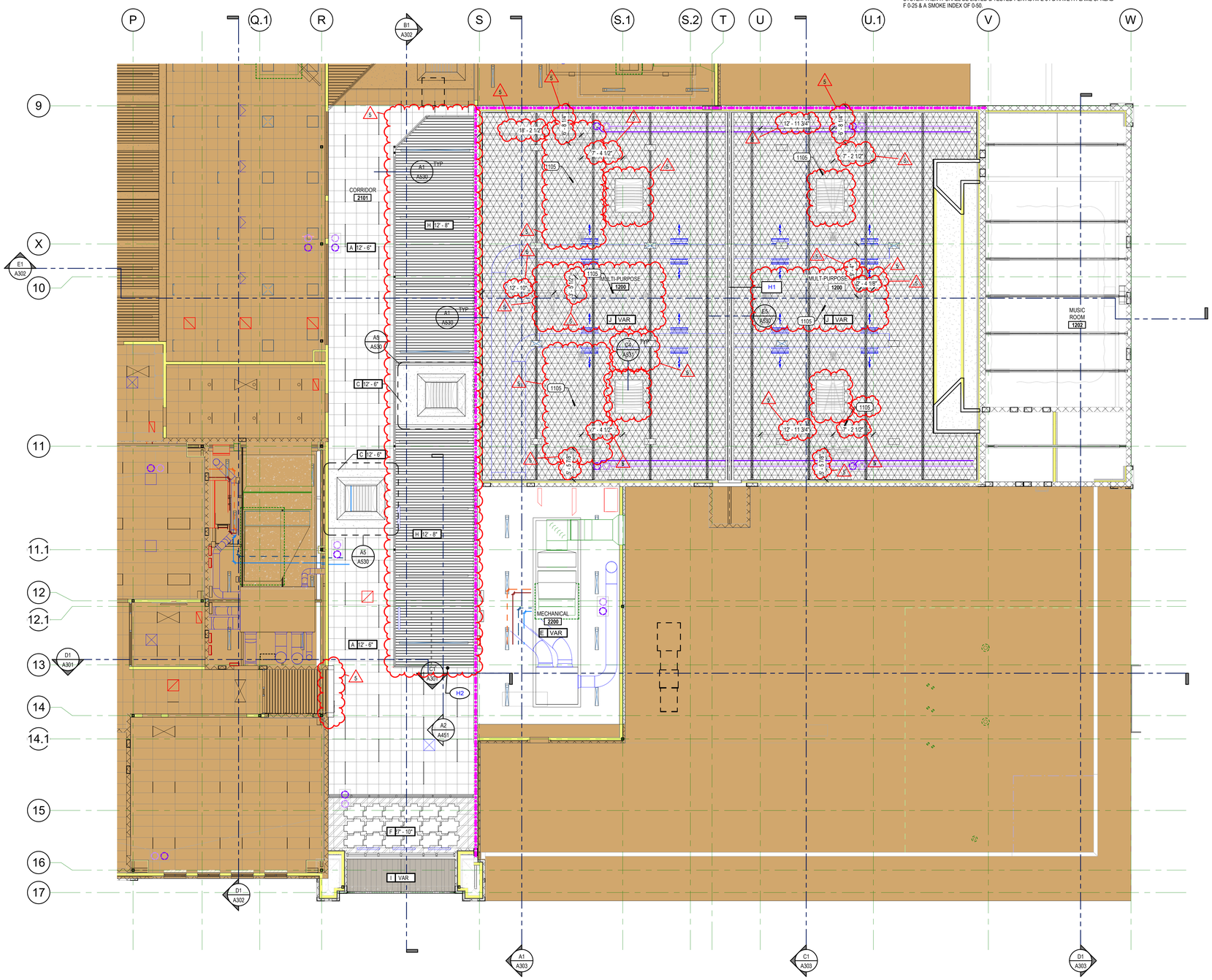
CEILING SYMBOLS

ELECTRICAL

- 2'X4' FLUORESCENT FIXTURE
- 2'X2' FLUORESCENT FIXTURE
- 1'X4' FLUORESCENT FIXTURE
- FLUORESCENT STRIP FIXTURE
- RECESSED DOWN LIGHT
- WALL WASH
- 1'X4' FLUORESCENT FIXTURE
- PENDANT LIGHT FIXTURE
- EXIT SIGN, SINGLE-SIDED
- EXIT SIGN, DOUBLE-SIDED
- FIRE ALARM
- SPEAKER
- SMOKE DETECTOR
- WIRELESS INTERNET

MECHANICAL

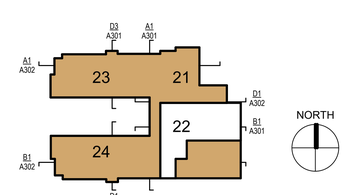
- SUPPLY GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- SPRINKLER HEAD - CEILING MOUNT
- SPRINKLER HEAD - WALL MOUNT



KEYED NOTES

1105 ADJUSTABLE BASKETBALL STANDARD, MOTORIZED RETRACTABLE, FRONT FOLDING

KEY PLAN - UPPER LEVEL



A1 PLAN - LEVEL 02 - RCP C

SCALE: 1/8" = 1'-0"

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STATE OF UTAH — JASON BREWSTER — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 22 ENLARGED REFLECTED CEILING PLAN - LEVEL 02

A122.4

11/17/2023 11:53:22 AM

KEYED NOTES

611	16" ADJUSTABLE SHELVING, U.N.O.
1023	FIRE EXTINGUISHER, TYPE K, WALL MOUNTED
1026.1	SS MAGNETIC STRIP, 1 1/2
1039	48"X60" WHITE BOARD
1040	72"X60" WHITE BOARD
1041	96"X60" WHITE BOARD
1210	MOBILE COMPUTER CART, NIC
2200	SINK AND FAUCET
2205	DRINKING FOUNTAINS HIGH/LOW, W/ BOTTLE FILLER OVER LOWER FOUNTAIN
2304	RETURN AIR CHASE AND MECHANICAL GRILLE, W/ MTL. STUD FRAMING & GYP. BD. SURROUND, SEE PLANS & INT. ELEVATIONS. PAINT INSIDE OF CHASE WALLS BLACK.

PLAN NOTES

1. WHERE FLOOR DRAINS ARE INSTALLED THE FLOOR IS TO SLOPE TO THE DRAIN. THE MAXIMUM SLOPE IS NOT TO EXCEED 2% WHILE THE MINIMUM SLOPE IS NOT TO BE LESS THAN 1%.
2. WHERE CONCRETE PADS ARE CALLED TO BE CONSTRUCTED UNDER EQUIPMENT THE SLAB IS TO BE 8" THICK, U.N.O., AND IS TO HAVE #4 BARS AT 18" O.C. EACH WAY. COORDINATE DIMENSIONS OF PAD WITH ACTUAL EQUIPMENT SPEC.
3. ALL MECHANICAL ROOMS TO RECEIVE A CONCRETE CURB AROUND INSIDE PERIMETER WALLS. SEE SHEET A573 FOR CURB DETAILS
4. SEE SHEET **A573** AND **A574** FOR TYPICAL FLOORING TRANSITION DETAILS.
5. THE CONTRACTOR IS TO ENSURE THAT BETWEEN ANY FINISH FLOOR ELEVATION TO 36" A.F.F. ALL GUARDRAILS ARE TO BE CONSTRUCTED AND INSTALLED SO THAT A 4 3/8" SPHERE WILL NOT PASS BETWEEN ANY TWO ADJACENT GUARDRAIL COMPONENTS OR BETWEEN THE EDGE OF A GUARDRAIL AND ALL ADJACENT BUILDING ELEMENT SUCH AS A WALL OR FLOOR. AN 4 3/8" DIAMETER SPHERE IS NOT TO PASS BETWEEN THE ABOVE MENTIONED COMPONENTS AND ELEMENTS FROM AN ELEVATION 36" A.F.F. AND HIGHER.
6. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

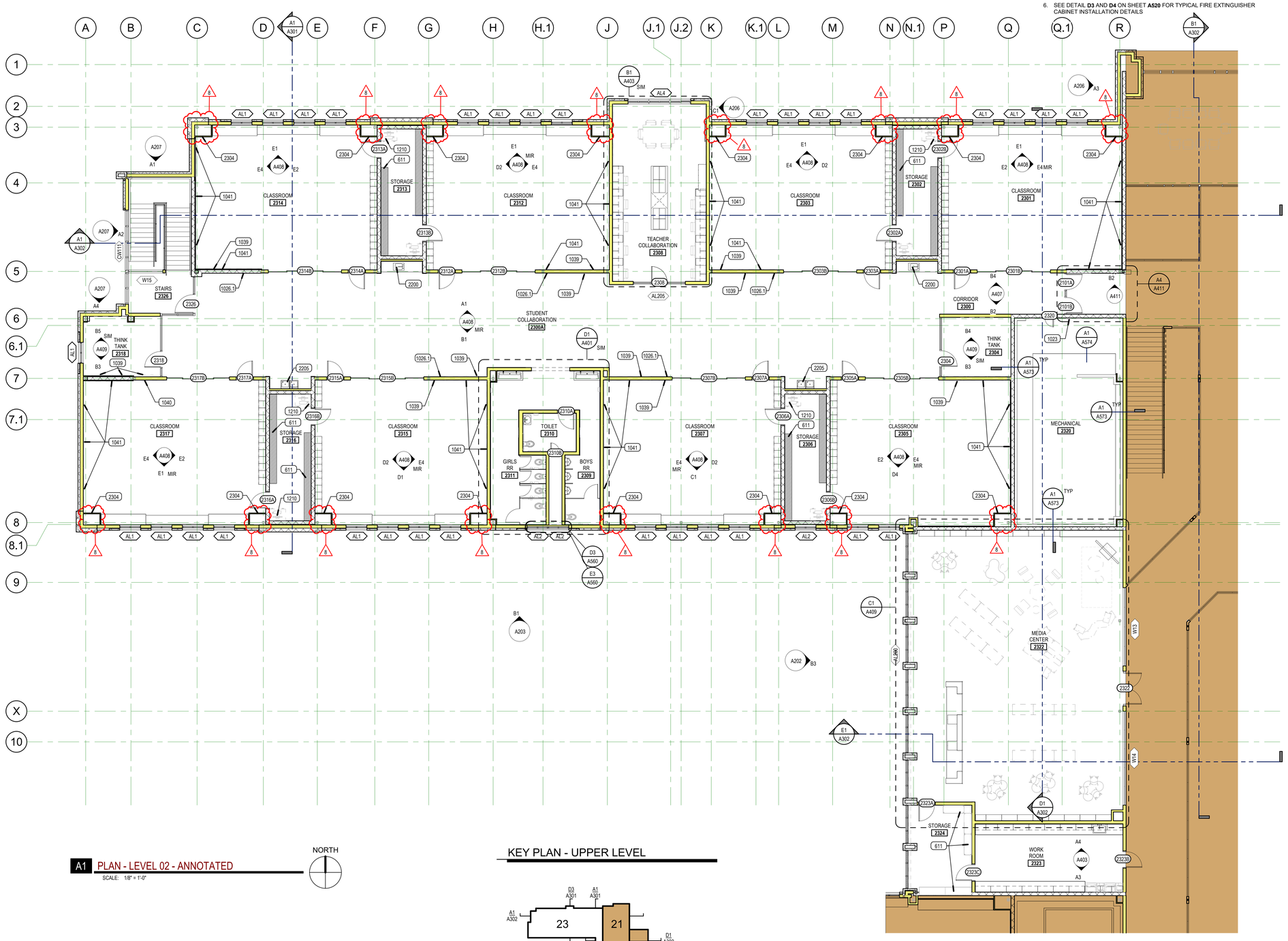
PARTITION + FRAMING GENERAL NOTES

FRAMED WALL PARTITIONS

1. PARTITION TYPE INDICATIONS ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH SHEETS AND INTERIOR ELEVATIONS FOR WALL FINISHES INCLUDING TILE COURSING AND LAYOUT AND/OR THE DESIGNATIONS ON THE PLANS FOR ADDITIONAL INFORMATION REGARDING APPLIED FINISHES.
2. WHERE PARTITION TYPE DESIGNATION ON FLOOR PLANS IS INTERRUPTED BY DOOR OPENING, GLAZED PARTITION, ETC., CONSTRUCTION ABOVE INTERRUPTION (AND WHERE APPLICABLE BELOW) IS TO BE THE SAME AS THAT DESIGNATED FOR THE PARTITION IN WHICH THE INTERRUPTION OCCURRED.
3. THE MINIMUM REQUIREMENTS FOR CONSTRUCTION OF EACH PARTITION TYPE AS EXPRESSED BY THE INDICATED REFERENCE ARE INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THE WORK OF THIS PROJECT. HOWEVER, ADDITIONAL AND/OR MORE RESTRICTIVE REQUIREMENTS MAY BE INDICATED BY THE SPECIFICATIONS AND DRAWINGS. SUCH REQUIREMENTS ALSO APPLY AND SHALL GOVERN. SUCH REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   a. USE 5/8" THICK GYPSUM BOARD THROUGHOUT UNLESS NOTED OTHERWISE.
   b. USE 16" OC MAX STUD SPACING UNLESS NOTED OTHERWISE IN THESE DOCUMENTS. THE SPACING STATED BY THE REFERENCED APPROVAL OR EST REPORT IS THE MAX SPACING IF ALLOWED IN THESE DOCUMENTS.
   c. USE STUDS OF GAUGE INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. THE GAUGE STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM GAUGE TESTED, 20 GA (30 MILS) IS THE MINIMUM ALLOWED IN THESE DOCUMENTS.
4. USE STUDS OF DEPTH INDICATED BY THIS SET OF DOCUMENTS. THE DEPTH STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM DEPTH TESTED DEPTH ALLOWED IN THESE DOCUMENTS. SEE STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CONSTRUCTION OF CONCRETE, MASONRY AND STUD WALLS
5. PROVIDE FIRE RATED CONSTRUCTION ASSEMBLIES WHERE INDICATED ON SHEETS G100's AND FLOOR PLAN DRAWINGS.
6. ALL DIMENSIONS ARE CENTER OF STUD OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. FACE OF STUD WILL BE NOTED AS FOS AND FACE OF FINISHED WALL WILL BE NOTED AS FOW.
7. AT ALL INTERIOR WALLS, STUDS, INSULATION AND GYPSUM BOARD ARE TO EXTEND TO THE DECK ABOVE. UNLESS NOTED OTHERWISE.
8. WALL TYPES NOT NOTED ARE ASSUMED TO MATCH ADJACENT ROOMS. SEE SHEETS FOR FINISHES, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. ALL METAL STUD PARTITIONS ARE CONSIDERED ACOUSTIC PARTITIONS AND ARE TO RECEIVE A TYPE 1 SOUND ATTENUATION BLANKET. THICKNESS TO MATCH STUD DEPTH, UNLESS NOTED OTHERWISE.
10. REFER TO SHEET **A520** FOR TYPICAL INTERIOR WALL CONDITIONS ASSOCIATED WITH ALL METAL STUD PARTITIONS.
11. PROVIDE CONTROL JOINTS IN METAL FRAMED WALLS AT APPROXIMATELY 30 FEET ON CENTER. LOCATE AT CORNER ABOVE DOORS OR INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. **CONSULT WITH ARCHITECT PRIOR TO COMMENCING FRAMING.** INSTALL PER DETALS **C2 AND C3/ A520** FOR CONTROL JOINTS.
12. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., GYPSUM BOARD IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM. THE OPENING FOR DUCTS OR LARGE PENETRATIONS SHALL BE FRAMED WITH A HEADER, ADD AN ANGLED CORNER BRACE IF THE GAP EXCEEDS 3" FROM FRAMING TO THE OPENING.
13. PROVIDE BLOCKING / BACKING FOR ALL WALL MOUNTED EQUIPMENT. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR CABINETS, GRAB BARS ETC. INSTALL BLOCKING AS DETAILED OR AS REQUIRED TO MOUNT SUCH DEVICES. ALL BLOCKING IS TO BE FIRE RETARDANT TREATED. INSTALL PER SHEET **A520**
14. **WHERE THERE IS LIMITED WATER EXPOSURE:** INSTALL ONE LAYER OF 5/8" TYPE X WATER RESISTANT GYPSUM BOARD PER ASTM C1396 (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION AT THE FOLLOWING LOCATIONS:
   a. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITORS SINKS
   b. AT OTHER LOCATIONS, I.E. TOILET ROOMS AND KITCHENS, AND AS INDICATED ON THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
15. INSTALL ONE LAYER OF 5/8" GLASS MAT TILE BACKER BOARD IN LIEU OF GYPSUM BOARD (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION WHERE THERE IS NO FIRE RATING AND OVER GYPSUM BOARD FACE LAYER AT FIRE RATED PARTITIONS AT THE FOLLOWING LOCATIONS.
16. AT WET LOCATIONS, SUCH AS SHOWER STALLS AND TUB SURROUNDS.
   a. WHERE CERAMIC TILE FINISHES ARE INDICATED PER THE FINISH PLANS AND/OR INTERIOR ELEVATIONS.
   b. AT OTHER LOCATIONS AS INDICATED BY THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
17. WHERE NEW WALLS OR FURRING ARE INDICATED TO BE DIMENSIONED OFF OF AN EXISTING WALL, THE NEW WALL SHALL BE STRAIGHT AND PLUMB REGARDLESS OF THE CONDITION OF THE EXISTING WALL.
18. ALL EXTERIOR STUD WALLS TO HAVE CONTINUOUS INSULATION, VAPOR BARRIER AND AIR INFILTRATION BARRIER FOR THE FULL HEIGHT AND LENGTH OF THE WALL.SEAL ALL PENETRATIONS. SEE DETAILS ON SHEET **A520** FOR TYPICAL TOP OF WALL CONDITION
19. THE AIR INFILTRATION BARRIER IS TO WRAP INTO ALL WINDOW AND DOOR OPENINGS.
20. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

MASONRY OR CONCRETE WALLS

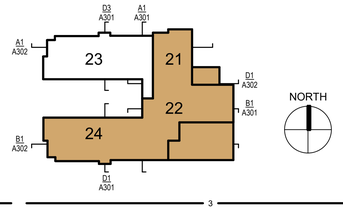
1. SEE STRUCTURAL PLANS FOR ADDITIONAL CONCRETE AND MASONRY WALL INFORMATION.
2. SEE EXTERIOR ELEVATIONS FOR COURSING, MASONRY TYPES AND METAL PANEL ORIENTATION PER **EXTERIOR ELEVATION SHEETS.**
3. ALL MASONRY WALLS ARE TO BE REINFORCED AND ARE TO BE SET ON REINFORCED FOOTINGS. SEE THE **EXTERIOR ELEVATION SHEETS** FOR LOCATION OF CONTROL JOINTS. WHERE NOT NOTED, CONTROL JOINTS TO BE LOCATED AS PER THE REQUIREMENTS FOUND IN THE STRUCTURAL DOCUMENTS BUT ARE NOT TO EXCEED 30' OC. SEE THE STRUCTURAL DRAWINGS FOR REINFORCING AND OTHER DETAILS PERTAINING TO MASONRY WALLS. IF NOT OTHERWISE NOTED, LOCATE CONTROL JOINTS AT CORNER ABOVE DOORS, INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. CONSULT WITH ARCHITECT PRIOR TO INSTALLING PER DETAIL **C1/ A520**
4. SEE IBC 2021, CHAPTER 7 FOR FIRE RESISTIVE REQUIREMENTS ON NEW CONCRETE AND CONCRETE MASONRY UNIT WALLS.
   - CMU WALLS (IBC TABLE 721.1(2), ITEM 3)
   - CAST IN PLACE CONCRETE WALLS (IBC TABLE 722.2.1.1)
5. REFER TO DETAIL SHEET **A520** FOR TYPICAL WALL CONDITIONS ASSOCIATED WITH ALL AND MASONRY PARTITIONS.
6. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., MASONRY IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM.
7. **PROTECTION OF MASONRY:** DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK. EXCEPT WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO REMAIN ABOVE 65 DEG F AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS. (THIS IS TO PREVENT CONDENSATION FROM COVERED WALLS CAUSING A MOISTURE PROBLEM.) COVER PARTIALLY COMPLETED MASONRY EACH DAY THAT CONSTRUCTION IS NOT IN PROGRESS. WALLS ARE TO BE PROTECTED UNTIL THEY ARE PERMANENTLY PROTECTED BY THE ROOFING MEMBRANE OVER THE CAP PLATE. THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY PROTECTION IMMEDIATELY FOLLOWING THE TOPPING OUT OF EACH SECTION OF WALL BY INSTALLING WATERPROOF SHEETING OVER A CONTINUOUS CAP PLATE UNTIL THE ROOFING MEMBRANE IS INSTALLED. **A SOLID GROUTED TOP BOND BEAM SHALL NOT BE CONSIDERED ADEQUATE PROTECTION FOR THE WALL.**
8. IT IS ACCEPTABLE TO PLACE NON-INTEGRAL COLORED CMU IN PORTIONS OF WALLS INDICATED TO BE CONSTRUCTED OF INTEGRAL COLOR CMU IF THE DOCUMENTS SHOW THESE PORTIONS OF WALL PAINTED OR COVERED WITH TILE, STUD FURRING, ABOVE CEILINGS OR UNDER ROOFING MEMBRANE. IT IS NOT ACCEPTABLE TO UTILIZE NON INTEGRAL COLORED CMU BEHIND CABINETS, FURNISHINGS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CLIMBING WALLS AND LOCKERS.
9. AT ALL SPLIT FACE AND PAINTED CMU THE HORIZONTAL AND VERTICAL MORTAR JOINTS ARE TO BE CONCAVE. AT ALL HONED BLOCK THE HORIZONTAL MORTAR JOINT IS TO BE A WEATHERED JOINT AND ALL VERTICAL JOINTS ARE TO BE RAKED.
10. PROVIDE A 3/4" CHAMFER ALL INTERIOR EXPOSED VERTICAL MASONRY CORNERS FROM 8" AFF TO BOTTOM OF MASONRY LINTEL OR IF NO LINTEL EXISTS, STOP CHAMFER @ FIRST MASONRY JOINT BELOW CEILING. NOTE THAT THIS CHAMFER IS NOT TO BE PROVIDED AT CORNERS SHOWN IN THESE DOCUMENTS AS COVERED WITH WALL TILE. SEE DETAIL
11. **PROVIDE SPECIAL SHAPES**, SUCH AS "U" SHAPED CHANNEL FOR LINTELS OR HEADERS AND CAPPING UNITS FOR SASH AND OTHER SPECIAL CONDITIONS.
12. WHERE SPLIT FACE BLOCK IS SHOWN EXTENDING TO THE TOP OF A PARAPET, PROVIDE AN INTEGRAL COLOR SMOOTH FACE BLOCK AT THE TOP COURSE TO ALLOW THE CAP FLASHING TO FIT TIGHT AGAINST THE WALL.
13. CONTRACTOR TO COORDINATE AND PROVIDE SMOOTH MASONRY AT ALL FLASHING, REGLETS, GUTTERS, EDGES OF CEILING AND BASE AND OTHER ITEMS REQUIRING A SMOOTH FINISH THAT ARE HIDDEN.



A1 PLAN - LEVEL 02 - ANNOTATED
SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - UPPER LEVEL



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7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01
5	11/16/2023	BPS-ADDENDUM 01
8	12/04/2023	ASI-03

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BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 23 ENLARGED ANNOTATED PLAN - LEVEL 02

A123.1

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DIMENSION NOTES

1. ALL DIMENSIONS ARE TO CENTER OF STUD WALL OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. WHERE THE END OF A WALL IS INDICATED THE DIMENSION IS TO THE FINISH SURFACE OF THE WALL END.
2. UNLESS DIMENSIONED OTHERWISE, THE DIMENSION FROM THE BUCK OF A DOOR FRAME IS TO BE 4" TO THE WALL CORNER.
3. EXCEPT WHERE DIRECTED TO PLACE ITEMS OF WORK AT THE APPROXIMATE LOCATION SHOWN, DO NOT SCALE DRAWINGS FOR DIMENSIONAL INFORMATION. ALL ELEMENTS OF THE DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. ALL DIMENSIONS REQUIRED ARE SHOWN OR MAY BE DERIVED FROM THOSE SHOWN ON THE FLOOR PLANS, DETAIL PLANS, ELEVATIONS, SECTIONS, DETAILS, SCHEDULES AND SPECIFICATIONS. IF DIMENSIONS ARE NOT PRESENT, THE ARCHITECT IS TO BE NOTIFIED SO THAT A CLARIFICATION CAN BE ISSUED.
4. SMOKE AND FIRE RATED WALLS SHALL PERMANENTLY BE IDENTIFIED WITH SIGNS OR STENCILING IN THE CONCEALED SPACE. SUCH IDENTIFICATION SHALL BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8-INCH STROKE IN A CONTRASTING COLOR INCORPORATING THE WORDING, "FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS"

KEY FOR PARTITION TYPES

SEE SHEET A500 FOR WALL TYPE DETAILS AND NOTES

DENOTES TYPE OF CONSTRUCTION (SPEC. DIVISION) — 4A8

WALL
- 3X 0 SERIES CONCRETE
- 4X 0 SERIES MASONRY
- 5X 0 SERIES COLD FORMED METAL STUDS, 16 GA MIN.
- 9X 0 SERIES METAL STUDS

NOMINAL SIZES: V = VARIABLE/MATCHEXISITING
1 = 1 5/8" STUDS
2 = 2 1/2" STUDS
3 = 3 5/8" STUDS
4 = 4" STUDS / 4" (NOM.) C.M.U.
6 = 6" STUDS / 6" (NOM.) C.M.U.
8 = 8" STUDS / 8" (NOM.) C.M.U.
10 = 10" (NOM.) C.M.U. OR CONC.
12 = 12" (NOM.) C.M.U. OR CONC.

EXAMPLE: WALL TYPE 9A3 IS A 3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD ON BOTH SIDES.

RATED WALL LEGEND

- INCIDENTAL USE AREAS
- 1 HOUR SEPARATION
- 2 HOUR SEPARATION
- 3 HOUR SEPARATION

EXAMPLE: WALL TYPE 9A3-1 IS A ONE HOUR RATED, 3 5/8" METAL STUD WALL WITH 5/8" GYPSUM BOARD ON BOTH SIDES, PER ASSEMBLY REQUIREMENTS.

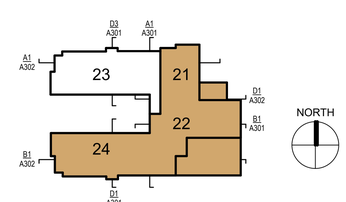
90X-R SERIES
- FIRE RATING (ONLY WHEN NOTED): 1 = 1 HOUR RATED ASSEMBLY; 2 = 2 HOUR RATED ASSEMBLY; 3 = 3 HOUR RATED ASSEMBLY

MATCH LINE

A1 PLAN - LEVEL 02 - DIMENSION + WALL TYPE
SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03
8	12/04/2023	ASI-03

OGDEN SCHOOL DISTRICT

OSD HILLCREST ELEMENTARY REBUILD

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BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 23 ENLARGED
DIMENSION + WALL TYPE
PLAN - LEVEL 02

A123.2

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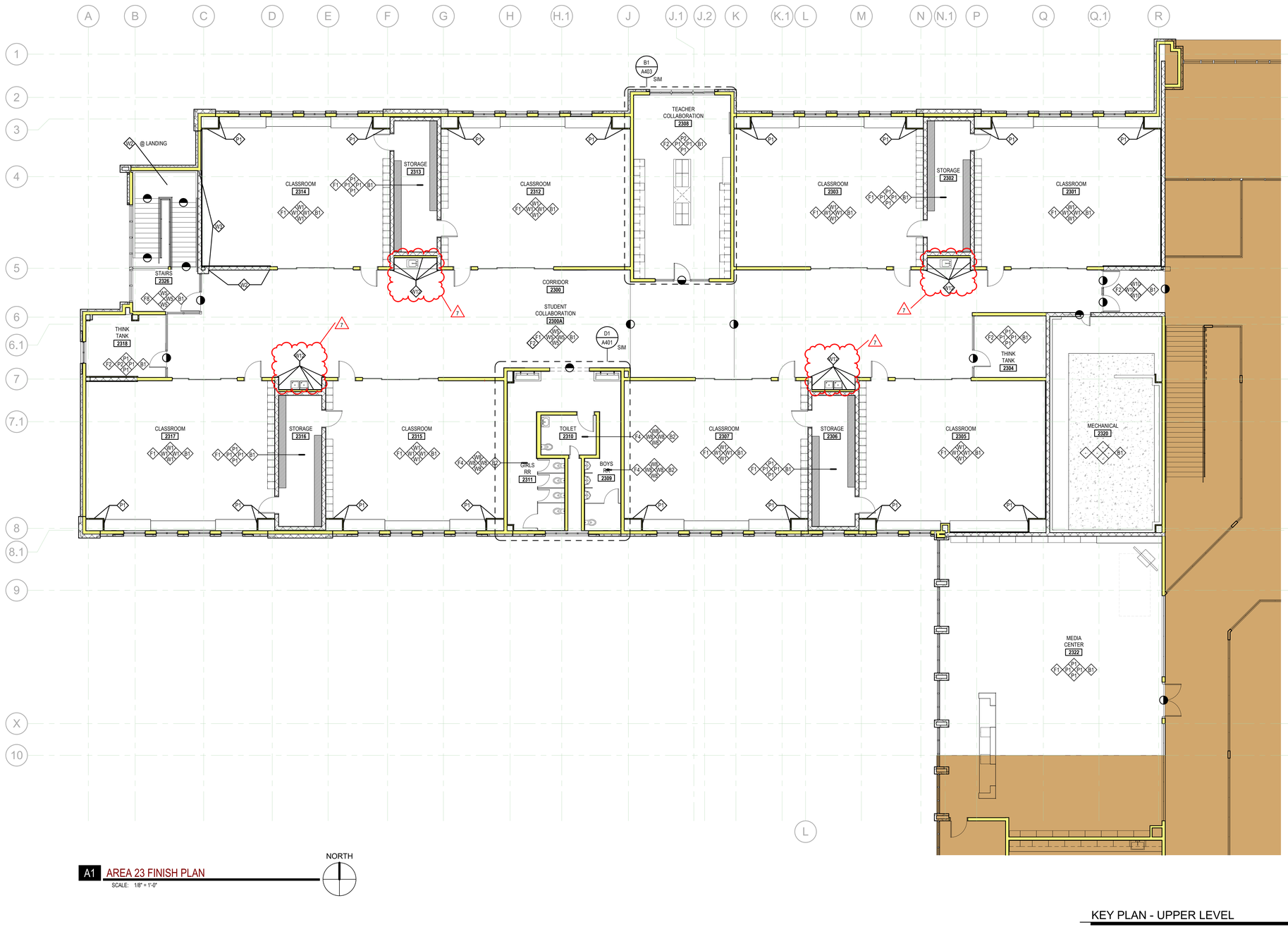
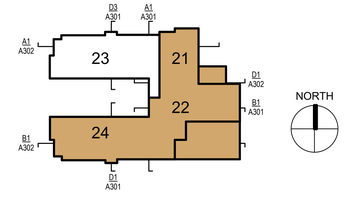


A1 AREA 23 FINISH PLAN

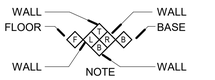
SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - UPPER LEVEL



FINISH PLAN SYMBOLS



SINGLE FINISH SYMBOLS INDICATE WHERE FINISHES ARE DIFFERENT FROM GENERAL ROOM FINISHES, OR PROVIDE ADDITIONAL FINISH INFORMATION

CHANGE AT FLOOR MATERIAL

IN ANY SPACE WHERE FINISHES ARE NOT DESIGNATED, ASSUME THE FOLLOWING FINISHES:

B2 4" RUBBER BASE
F1 CARPET TILES - GENERAL FIELD - LAID IN LINEAR BRICK PATTERN
W1: PRIMED & PAINTED WALL - GENERAL COLOR - EPOXY PAINT IN WE/DAMP AREAS
W3: SEALED CMU WHERE CMU IS PRESENT

GENERAL FINISH NOTES

1. PROVIDE EPOXY PAINT AT ALL RESTROOMS, SHOWERS, LOCKER ROOMS AND JANITOR CLOSETS.
2. ALL PAINTED STEEL BRACING AND COLUMNS TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. AT SOFFITS RECEIVING COLOR - PAINT ALL SIDES OF SOFFIT.
4. ALL METAL GUARDRAILS AND STAIR STRINGERS TO BE PAINTED SEE FINISH SCHEDULE FOR H.M. DOOR AND FRAME PAINT COLORS.
5. ALL EXPOSED CEILINGS TO BE PAINTED. REFER TO REFLECTED CEILING PLANS.
6. ALL FLOOR TRANSITIONS TO BE LOCATED AT CENTER OF DOOR, U.N.O. ALL FLOOR TRANSITIONS AT FLOOR TILE (T1) LOCATIONS TO BE LOCATED AT INSIDE CORNER OF DOOR.
7. PROVIDE FLOOR FINISH 'RT': RUBBER STAIR TREAD' AT STAIR TREADS AND LANDING.
8. PROVIDE A SMOOTH TRANSITION AT ALL FLOOR MATERIALS - CONTRACTOR TO INSTALL ALL FLOOR FINISHES AT SAME LEVEL, DESPITE DIFFERENT THICKNESS. PROVIDE FLOOR TRANSITION WHERE OCCURS.
9. SEE SHEET AXXX FOR FLOORING TRANSITION DETAILS.
10. SEE ELEVATION SHEETS FOR ALL WALL TILE PATTERNS.
11. PROVIDE TILE 4"X4" CERAMIC WALL TILE AT ALL JANITOR SINKS UNLESS NOTED OTHERWISE. PROVIDE TILE BULLNOSE TO FINISH OFF ALL EXPOSED EDGES.
12. ALL WALLS RECEIVING TILE WAINSCOT TO RECEIVE PAINT P1 ABOVE, U.N.O. SEE FINISH PLANS FOR ACCENT WALL LOCATIONS.
13. ALL GROUT JOINTS TO BE NO LARGER THAN 1/8".
14. PROVIDE 'CG: CORNER GUARD' AT ALL LOCATIONS WHERE TILE WAINSCOT WRAPS GYP. BD. CORNERS. CAP ALL TILE WAINSCOT WITH SCHLUTER STRIP (SL).
15. AT ALL TILE WAINSCOT, SCRIBE BOTTOM TILE TO MATCH FINISH FLOOR SURFACE AND CAULK WITH BASE 'NB'.
16. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF MILLWORK.
17. COORDINATE ALL MILLWORK WITH APPLIANCES BEFORE FABRICATION.
18. ALL COUNTERTOP, BACKSPLASHES, AND EDGE BANDING TO HAVE COORDINATING FINISHES.
19. ALL WOOD TRIM TO BE STAINED TO MATCH DOOR STAIN.

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01
5	11/16/2023	BP5-ADDENDUM 01
7	11/27/2023	BP5-ADDENDUM 03

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BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 23 ENLARGED FINISH PLAN - LEVEL 02

A123.3

11/27/2023 12:44:21 PM

HEADER SCHEDULE

H1	GYP. HEADER
H2	MASONRY HEADER

GENERAL CEILING NOTES

1. REFER TO DETAIL **C6/A530** FOR TYPICAL CEILING SUSPENSION & SEISMIC BRACING
2. REFER TO DETAIL **A6/A530** FOR TYPICAL SUSPENDED GYP. BOARD CEILINGS
3. ALL UNIDENTIFIED CEILING TYPES ON THE PLANS SHALL BE TYPE " A" AT 9'-4" A.F.F.
4. GRID SUSPENSION SYSTEMS SHALL BE CENTERED WITHIN AREAS INDICATED, UNLESS NOTED OTHERWISE
5. PAINT ALL EXPOSED STRUCTURE, MECHANICAL, DUCTS, ELECTRICAL WORK, PIPING, ETC. ALL VISIBLE ELEMENTS TO BE PAINTED AT TYPE "E" & TYPE "F" (ABOVE VENTWOOD)
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF MECHANICAL GRILLES, AND TO MECHANICAL DRAWINGS FOR QUANTITIES AND TYPES
7. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF LIGHT FIXTURES AND TO ELECTRICAL DRAWINGS FOR QUANTITY AND TYPES
8. MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE WORK WITH SPRINKLER CONTRACTOR TO AVOID CONFLICTS IN FIELD
9. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
10. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED.
11. HEADER HEIGHTS TO BE 9'-0" UNO.
12. CEILING TILE SHALL BE LISTED & TESTED ASTM E 84 & HAVE A FLAME SPREAD OF 0-25 & A SMOKE INDEX OF 0-450. IF THE CEIING TILE IS A COMPONENT PART OF A PLENUM SYSTEM THEN IT SHALL BE LISTED & TESTED PER ASTM E 84 & HAVE A FLAME SPREAD F 0-25 & A SMOKE INDEX OF 0-50.

CEILING LEGEND

- A - SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
- B - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING
- C - SUSPENDED 5/8" GYP. BD. CEILING SYSTEM - PAINTED (EPOXY PAINT AT WET LOCATIONS)
- D - SUSPENDED 5/8" GYP. CEILING SYSTEM (2 LAYERS) , PAINTED - 1 HOUR RATED
- E - OPEN TO STRUCTURE ABOVE
- F - SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH HOLD DOWN CLIPS
- G - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING (VINYL COATED)
- H - SUSPENDED WOOD PANEL CEILING SYSTEM
- I - EXTERIOR METAL SOFFIT SYSTEM. APPLY 3" CLOSED CELL SPRAY FOAM INSULATION ON UNDERSIDE OF DECK, WHERE OCCURS.
- J - SPRAY APPLIED ACOUSTICAL TREATMENT ON METAL DECK, WHITE - PAINT ALL BUILDING STRUCTURE, OVERHEAD MEP, ETC TO MATCH INSULATION COLOR

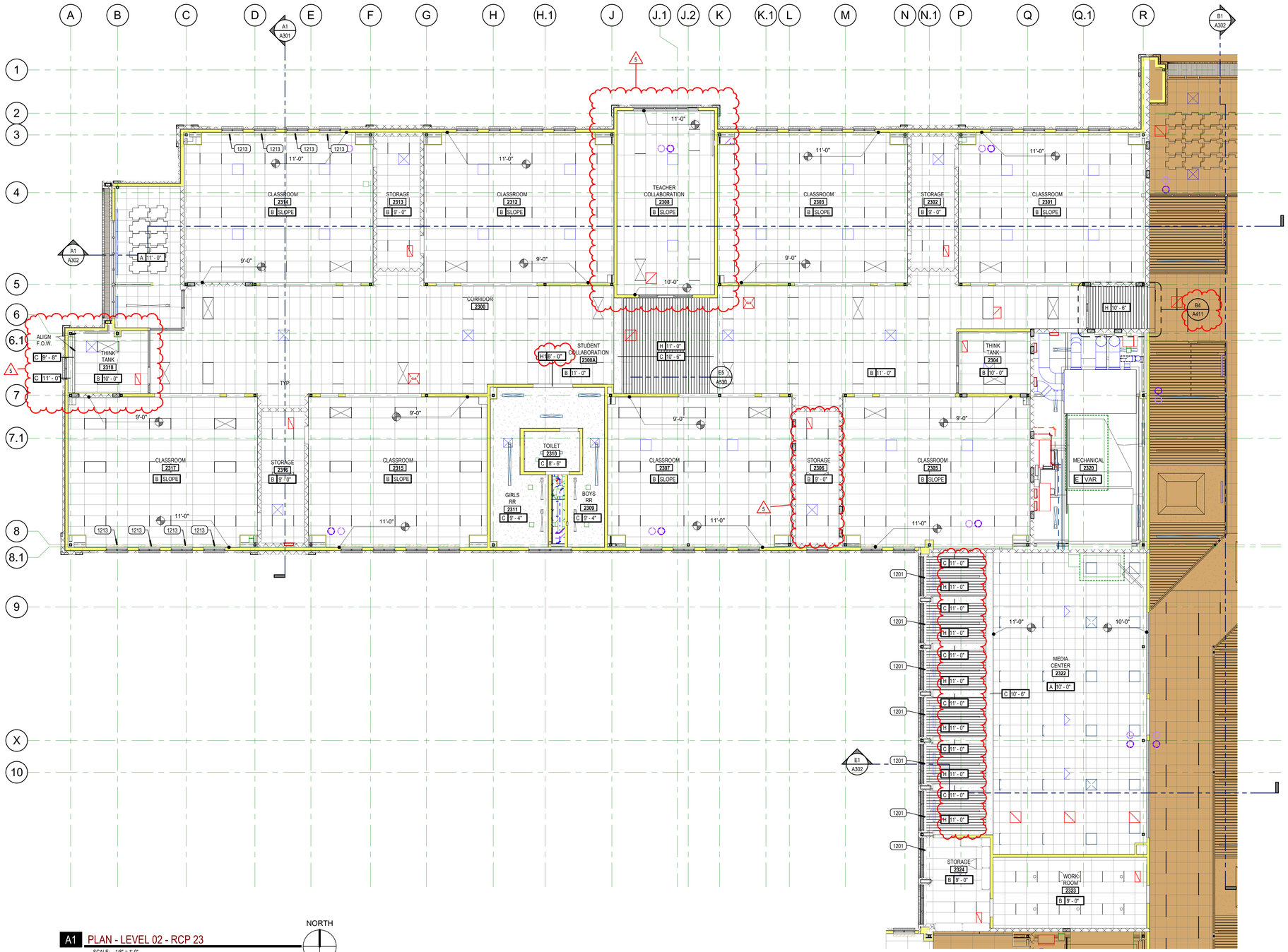
CEILING SYMBOLS

ELECTRICAL

- 2'X4' FLUORESCENT FIXTURE
- 2'X2' FLUORESCENT FIXTURE
- 1'X4' FLUORESCENT FIXTURE
- FLUORESCENT STRIP FIXTURE
- RECESSED DOWN LIGHT
- WALL WASH
- 1'X4' FLUORESCENT FIXTURE
- PENDANT LIGHT FIXTURE
- EXIT SIGN, SINGLE-SIDED
- EXIT SIGN, DOUBLE-SIDED
- FIRE ALARM
- SPEAKER
- SMOKE DETECTOR
- WIRELESS INTERNET

MECHANICAL

- SUPPLY GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- SPRINKLER HEAD - CEILING MOUNT
- SPRINKLER HEAD - WALL MOUNT



A1 PLAN - LEVEL 02 - RCP 23

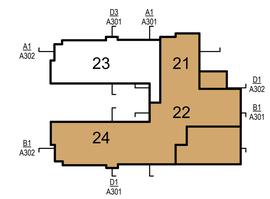
SCALE: 1/8" = 1'-0"

NORTH

KEYED NOTES

1201 MOTORIZED ROLLER WINDOW SHADES
1213 ROLLER WINDOW SHADES

KEY PLAN - UPPER LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

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BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 23 ENLARGED REFLECTED CEILING PLAN - LEVEL 02

A123.4

11/17/2023 11:30:36 AM

KEYED NOTES

611	16" ADJUSTABLE SHELVING, U.N.O.
1023	FIRE EXTINGUISHER, TYPE K, WALL MOUNTED
1026.1	SS MAGNETIC STRIP, 1 1/2
1039	48"X60" WHITE BOARD
1040	72"X60" WHITE BOARD
1041	96"X60" WHITE BOARD
1210	MOBILE COMPUTER CART, NIC
2200	SINK AND FAUCET
2205	DRINKING FOUNTAINS HIGH/LOW, W/ BOTTLE FILLER OVER LOWER FOUNTAIN
2304	RETURN AIR CHASE AND MECHANICAL GRILLE, W/ MTL. STUD FRAMING & GYP. BD. SURROUND, SEE PLANS & INT. ELEVATIONS. PAINT INSIDE OF CHASE WALLS BLACK.

PLAN NOTES

1. WHERE FLOOR DRAINS ARE INSTALLED THE FLOOR IS TO SLOPE TO THE DRAIN. THE MAXIMUM SLOPE IS NOT TO EXCEED 2% WHILE THE MINIMUM SLOPE IS NOT TO BE LESS THAN 1%.
2. WHERE CONCRETE PADS ARE CALLED TO BE CONSTRUCTED UNDER EQUIPMENT THE SLAB IS TO BE 8" THICK, U.N.O., AND IS TO HAVE #4 BARS AT 18" O.C. EACH WAY. COORDINATE DIMENSIONS OF PAD WITH ACTUAL EQUIPMENT SPEC.
3. ALL MECHANICAL ROOMS TO RECEIVE A CONCRETE CURB AROUND INSIDE PERIMETER WALLS. SEE SHEET A573 FOR CURB DETAILS
4. SEE SHEET **A573** AND **A574** FOR TYPICAL FLOORING TRANSITION DETAILS.
5. THE CONTRACTOR IS TO ENSURE THAT BETWEEN ANY FINISH FLOOR ELEVATION TO 36" A.F.F. ALL GUARDRAILS ARE TO BE CONSTRUCTED AND INSTALLED SO THAT A 4 3/8" SPHERE WILL NOT PASS BETWEEN ANY TWO ADJACENT GUARDRAIL COMPONENTS OR BETWEEN THE EDGE OF A GUARDRAIL AND ALL ADJACENT BUILDING ELEMENT SUCH AS A WALL OR FLOOR. AN 4 3/8" DIAMETER SPHERE IS NOT TO PASS BETWEEN THE ABOVE MENTIONED COMPONENTS AND ELEMENTS FROM AN ELEVATION 36" A.F.F. AND HIGHER.
6. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

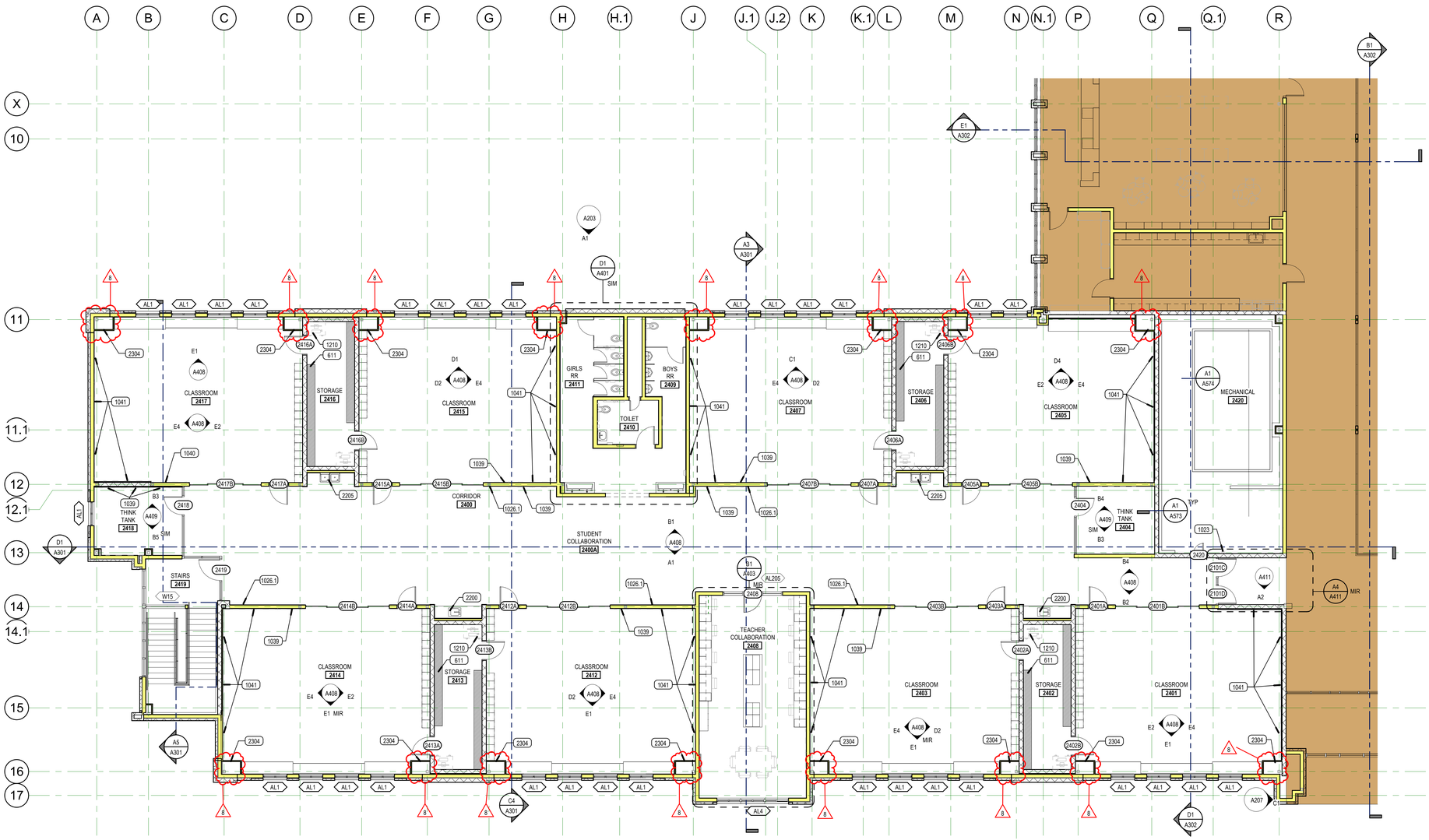
PARTITION + FRAMING GENERAL NOTES

FRAMED WALL PARTITIONS

1. PARTITION TYPE INDICATIONS ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH SHEETS AND INTERIOR ELEVATIONS FOR WALL FINISHES INCLUDING TILE COURSING AND LAYOUT AND/OR THE DESIGNATIONS ON THE PLANS FOR ADDITIONAL INFORMATION REGARDING APPLIED FINISHES.
2. WHERE PARTITION TYPE DESIGNATION ON FLOOR PLANS IS INTERRUPTED BY DOOR OPENING, GLAZED PARTITION, ETC., CONSTRUCTION ABOVE INTERRUPTION (AND WHERE APPLICABLE BELOW) IS TO BE THE SAME AS THAT DESIGNATED FOR THE PARTITION IN WHICH THE INTERRUPTION OCCURRED.
3. THE MINIMUM REQUIREMENTS FOR CONSTRUCTION OF EACH PARTITION TYPE AS EXPRESSED BY THE INDICATED REFERENCE ARE INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THE WORK OF THIS PROJECT. HOWEVER, ADDITIONAL AND/OR MORE RESTRICTIVE REQUIREMENTS MAY BE INDICATED BY THE SPECIFICATIONS AND DRAWINGS. SUCH REQUIREMENTS ALSO APPLY AND SHALL GOVERN. SUCH REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   a. USE 5/8" THICK GYPSUM BOARD THROUGHOUT UNLESS NOTED OTHERWISE.
   b. USE 16" OC MAX STUD SPACING UNLESS NOTED OTHERWISE IN THESE DOCUMENTS. THE SPACING STATED BY THE REFERENCED APPROVAL OR EST REPORT IS THE MAX SPACING IF ALLOWED IN THESE DOCUMENTS.
   c. USE STUDS OF GAUGE INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. THE GAUGE STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM GAUGE TESTED, 20 GA (30 MILS) IS THE MINIMUM ALLOWED IN THESE DOCUMENTS.
4. USE STUDS OF DEPTH INDICATED BY THIS SET OF DOCUMENTS. THE DEPTH STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM DEPTH TESTED DEPTH ALLOWED IN THESE DOCUMENTS. SEE STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CONSTRUCTION OF CONCRETE, MASONRY AND STUD WALLS
5. PROVIDE FIRE RATED CONSTRUCTION ASSEMBLIES WHERE INDICATED ON SHEETS G100's AND FLOOR PLAN DRAWINGS.
6. ALL DIMENSIONS ARE CENTER OF STUD OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. FACE OF STUD WILL BE NOTED AS FOS AND FACE OF FINISHED WALL WILL BE NOTED AS FOW.
7. AT ALL INTERIOR WALLS, STUDS, INSULATION AND GYPSUM BOARD ARE TO EXTEND TO THE DECK ABOVE. UNLESS NOTED OTHERWISE.
8. WALL TYPES NOT NOTED ARE ASSUMED TO MATCH ADJACENT ROOMS. SEE SHEETS FOR FINISHES, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. ALL METAL STUD PARTITIONS ARE CONSIDERED ACOUSTIC PARTITIONS AND ARE TO RECEIVE A TYPE 1 SOUND ATTENUATION BLANKET. THICKNESS TO MATCH STUD DEPTH, UNLESS NOTED OTHERWISE.
10. REFER TO SHEET **A520** FOR TYPICAL INTERIOR WALL CONDITIONS ASSOCIATED WITH ALL METAL STUD PARTITIONS.
11. PROVIDE CONTROL JOINTS IN METAL FRAMED WALLS AT APPROXIMATELY 30 FEET ON CENTER. LOCATE AT CORNER ABOVE DOORS OR INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. **CONSULT WITH ARCHITECT PRIOR TO COMMENCING FRAMING.** INSTALL PER DETAILS **C2 AND C3/ A520** FOR CONTROL JOINTS.
12. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., GYPSUM BOARD IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM. THE OPENING FOR DUCTS OR LARGE PENETRATIONS SHALL BE FRAMED WITH A HEADER, ADD AN ANGLED CORNER BRACE IF THE GAP EXCEEDS 3" FROM FRAMING TO THE OPENING.
13. PROVIDE BLOCKING / BACKING FOR ALL WALL MOUNTED EQUIPMENT. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR CABINETS, GRAB BARS ETC. INSTALL BLOCKING AS DETAILED OR AS REQUIRED TO MOUNT SUCH DEVICES. ALL BLOCKING IS TO BE FIRE RETARDANT TREATED. INSTALL PER SHEET **A520**
14. **WHERE THERE IS LIMITED WATER EXPOSURE:** INSTALL ONE LAYER OF 5/8" TYPE X WATER RESISTANT GYPSUM BOARD PER ASTM C1396 (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION AT THE FOLLOWING LOCATIONS:
   a. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITORS SINKS
   b. AT OTHER LOCATIONS, I.E. TOILET ROOMS AND KITCHENS, AND AS INDICATED ON THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
15. INSTALL ONE LAYER OF 5/8" GLASS MAT TILE BACKER BOARD IN LIEU OF GYPSUM BOARD (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION WHERE THERE IS NO FIRE RATING AND OVER GYPSUM BOARD FACE LAYER AT FIRE RATED PARTITIONS AT THE FOLLOWING LOCATIONS.
16. AT WET LOCATIONS, SUCH AS SHOWER STALLS AND TUB SURROUNDS.
   a. WHERE CERAMIC TILE FINISHES ARE INDICATED PER THE FINISH PLANS AND/OR INTERIOR ELEVATIONS.
   b. AT OTHER LOCATIONS AS INDICATED BY THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
17. WHERE NEW WALLS OR FURRING ARE INDICATED TO BE DIMENSIONED OFF OF AN EXISTING WALL, THE NEW WALL SHALL BE STRAIGHT AND PLUMB REGARDLESS OF THE CONDITION OF THE EXISTING WALL.
18. ALL EXTERIOR STUD WALLS TO HAVE CONTINUOUS INSULATION, VAPOR BARRIER AND AIR INFILTRATION BARRIER FOR THE FULL HEIGHT AND LENGTH OF THE WALL.SEAL ALL PENETRATIONS. SEE DETAILS ON SHEET **A520** FOR TYPICAL TOP OF WALL CONDITION
19. THE AIR INFILTRATION BARRIER IS TO WRAP INTO ALL WINDOW AND DOOR OPENINGS.
20. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

MASONRY OR CONCRETE WALLS

1. SEE STRUCTURAL PLANS FOR ADDITIONAL CONCRETE AND MASONRY WALL INFORMATION.
2. SEE EXTERIOR ELEVATIONS FOR COURSING, MASONRY TYPES AND METAL PANEL ORIENTATION PER **EXTERIOR ELEVATION SHEETS.**
3. ALL MASONRY WALLS ARE TO BE REINFORCED AND ARE TO BE SET ON REINFORCED FOOTINGS. SEE THE **EXTERIOR ELEVATION SHEETS** FOR LOCATION OF CONTROL JOINTS. WHERE NOT NOTED, CONTROL JOINTS TO BE LOCATED AS PER THE REQUIREMENTS FOUND IN THE STRUCTURAL DOCUMENTS BUT ARE NOT TO EXCEED 30' OC. SEE THE STRUCTURAL DRAWINGS FOR REINFORCING AND OTHER DETAILS PERTAINING TO MASONRY WALLS. IF NOT OTHERWISE NOTED, LOCATE CONTROL JOINTS AT CORNER ABOVE DOORS, INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. CONSULT WITH ARCHITECT PRIOR TO INSTALLING PER DETAIL **C1/ A520**
4. SEE IBC 2021, CHAPTER 7 FOR FIRE RESISTIVE REQUIREMENTS ON NEW CONCRETE AND CONCRETE MASONRY UNIT WALLS.
   - CMU WALLS (IBC TABLE 721.1(2), ITEM 3)
   - CAST IN PLACE CONCRETE WALLS (IBC TABLE 722.2.1.1)
5. REFER TO DETAIL SHEET **A520** FOR TYPICAL WALL CONDITIONS ASSOCIATED WITH ALL AND MASONRY PARTITIONS.
6. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., MASONRY IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM.
7. **PROTECTION OF MASONRY:** DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK, EXCEPT WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO REMAIN ABOVE 65 DEG F AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS. (THIS IS TO PREVENT CONDENSATION FROM COVERED WALLS CAUSING A MOISTURE PROBLEM.) COVER PARTIALLY COMPLETED MASONRY EACH DAY THAT CONSTRUCTION IS NOT IN PROGRESS. WALLS ARE TO BE PROTECTED UNTIL THEY ARE PERMANENTLY PROTECTED BY THE ROOFING MEMBRANE OVER THE CAP PLATE. THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY PROTECTION IMMEDIATELY FOLLOWING THE TOPPING OUT OF EACH SECTION OF WALL BY INSTALLING WATERPROOF SHEETING OVER A CONTINUOUS CAP PLATE UNTIL THE ROOFING MEMBRANE IS INSTALLED. **A SOLID GROUTED TOP BOND BEAM SHALL NOT BE CONSIDERED ADEQUATE PROTECTION FOR THE WALL.**
8. IT IS ACCEPTABLE TO PLACE NON-INTEGRAL COLORED CMU IN PORTIONS OF WALLS INDICATED TO BE CONSTRUCTED OF INTEGRAL COLOR CMU IF THE DOCUMENTS SHOW THESE PORTIONS OF WALL PAINTED OR COVERED WITH TILE, STUD FURRING, ABOVE CEILINGS OR UNDER ROOFING MEMBRANE. IT IS NOT ACCEPTABLE TO UTILIZE NON INTEGRAL COLORED CMU BEHIND CABINETS, FURNISHINGS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CLIMBING WALLS AND LOCKERS.
9. AT ALL SPLIT FACE AND PAINTED CMU THE HORIZONTAL AND VERTICAL MORTAR JOINTS ARE TO BE CONCAVE. AT ALL HONED BLOCK THE HORIZONTAL MORTAR JOINT IS TO BE A WEATHERED JOINT AND ALL VERTICAL JOINTS ARE TO BE RAKED.
10. PROVIDE A 3/4" CHAMFER ALL INTERIOR EXPOSED VERTICAL MASONRY CORNERS FROM 8' AFF TO BOTTOM OF MASONRY LINTEL OR IF NO LINTEL EXISTS, STOP CHAMFER @ FIRST MASONRY JOINT BELOW CEILING. NOTE THAT THIS CHAMFER IS NOT TO BE PROVIDED AT CORNERS SHOWN IN THESE DOCUMENTS AS COVERED WITH WALL TILE. SEE DETAIL
11. **PROVIDE SPECIAL SHAPES**, SUCH AS "U" SHAPED CHANNEL FOR LINTELS OR HEADERS AND CAPPING UNITS FOR SASH AND OTHER SPECIAL CONDITIONS.
12. WHERE SPLIT FACE BLOCK IS SHOWN EXTENDING TO THE TOP OF A PARAPET, PROVIDE AN INTEGRAL COLOR SMOOTH FACE BLOCK AT THE TOP COURSE TO ALLOW THE CAP FLASHING TO FIT TIGHT AGAINST THE WALL.
13. CONTRACTOR TO COORDINATE AND PROVIDE SMOOTH MASONRY AT ALL FLASHING, REGLETS, GUTTERS, EDGES OF CEILING AND BASE AND OTHER ITEMS REQUIRING A SMOOTH FINISH THAT ARE HIDDEN.

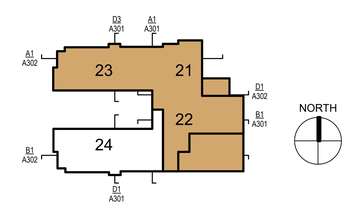


A1 PLAN - LEVEL 02 - ANNOTATED D

SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - UPPER LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: DECEMBER 08, 2023

STATE OF UTAH — REGISTERED — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01
5	11/16/2023	BPS-ADDENDUM 01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 24 ENLARGED ANNOTATED PLAN - LEVEL 02

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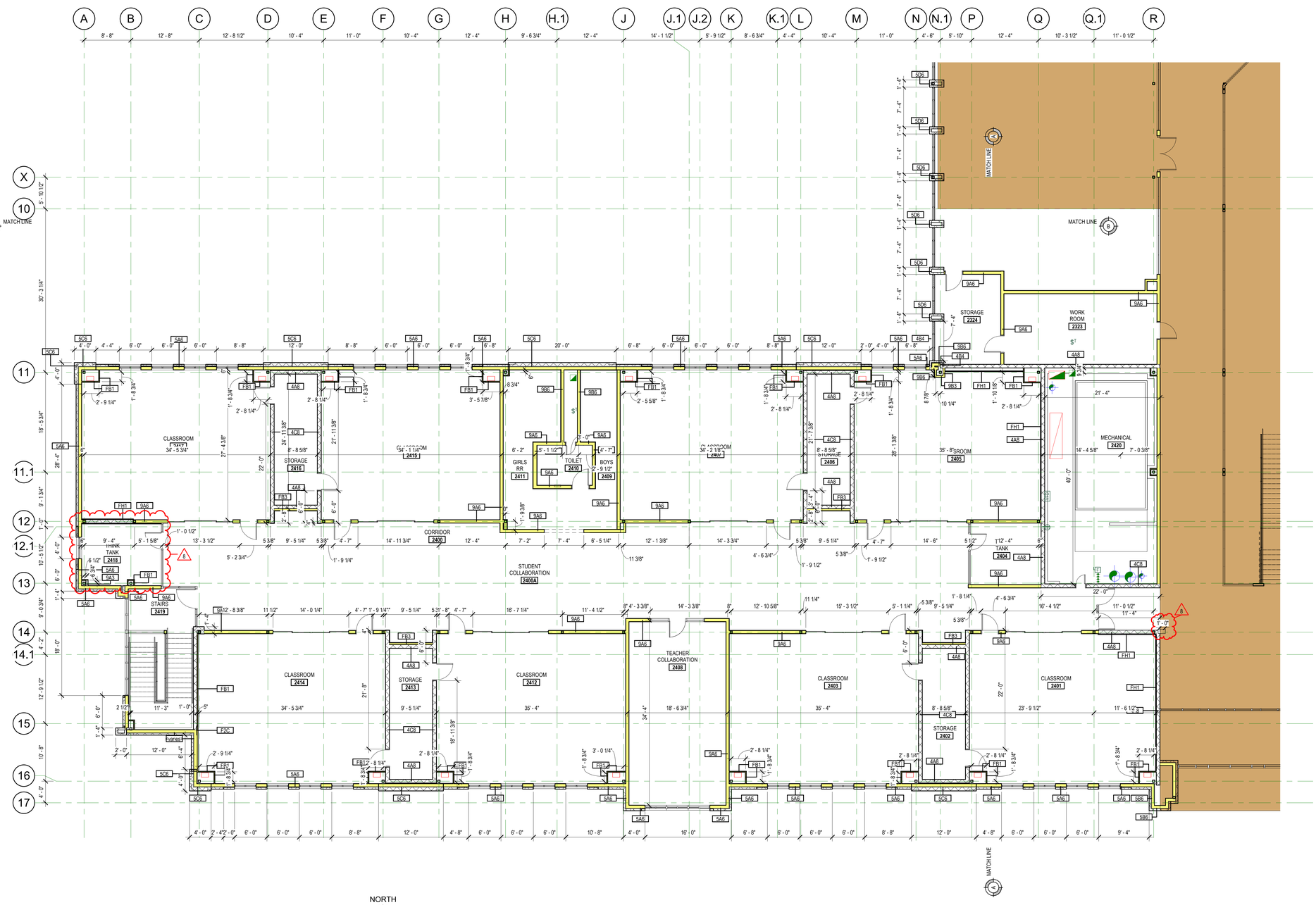
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CLASSROOM 2414
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CLASSROOM 2401
STORAGE 2416
STORAGE 2413
STORAGE 2324
STORAGE 2402
GIRLS RR 2411
BOYS RR 2409
TOILET 2410
CORRIDOR 2400
STUDENT COLLABORATION 2400A
TEACHER COLLABORATION 2408
WORK ROOM 2323
MECHANICAL 2420
TRINK TANK 2418
T12' - 4" TANK 2404
STAIRS 2419
STAIRS 2405
STAIRS 2406
STAIRS 2421
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CLASSROOM 2417
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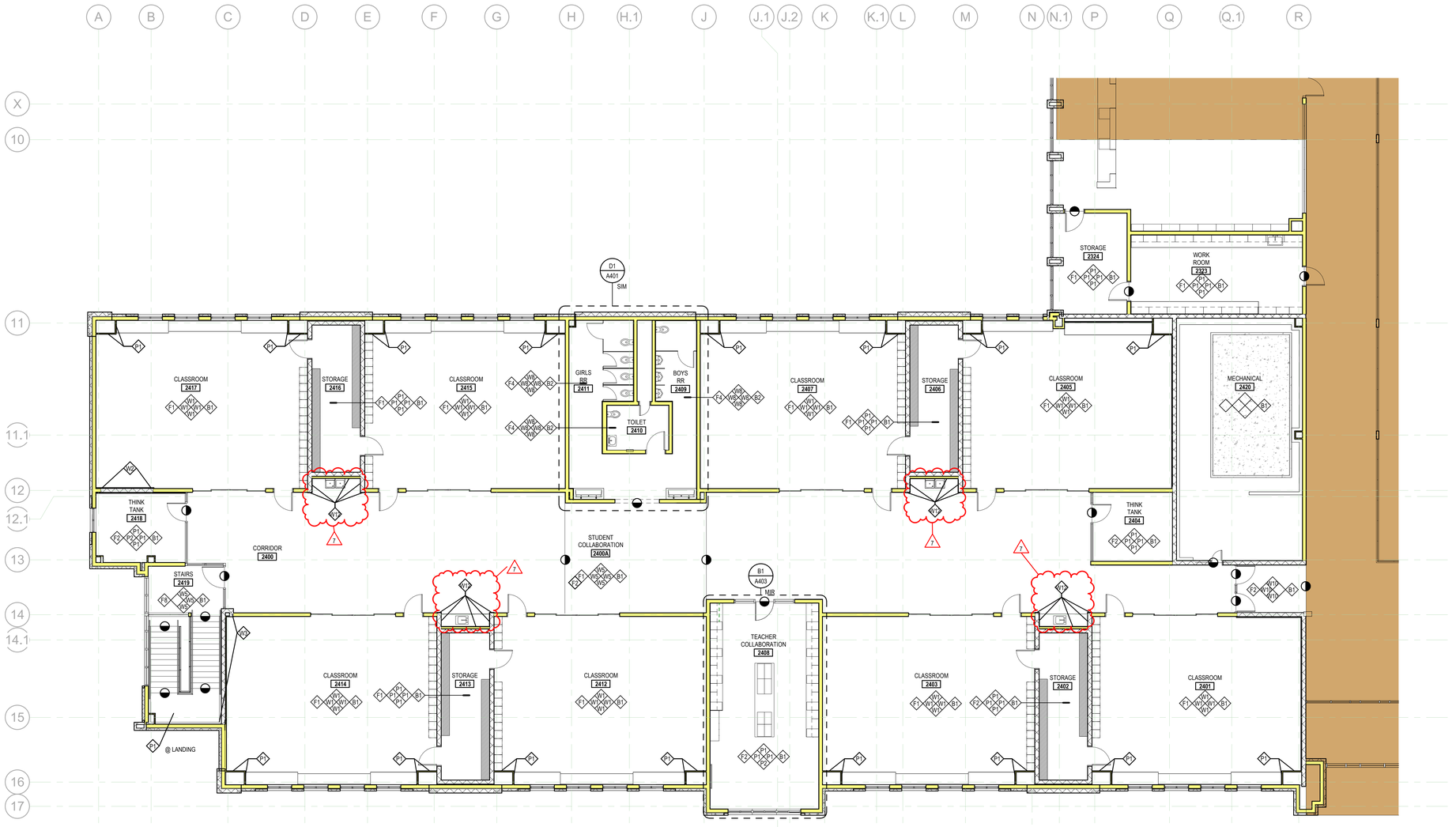
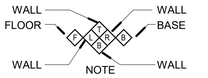


A1 AREA 24 FINISH PLAN

SCALE: 1/8" = 1'-0"

NORTH

FINISH PLAN SYMBOLS



SINGLE FINISH SYMBOLS INDICATE WHERE FINISHES ARE DIFFERENT FROM GENERAL ROOM FINISHES, OR PROVIDE ADDITIONAL FINISH INFORMATION

CHANGE AT FLOOR MATERIAL

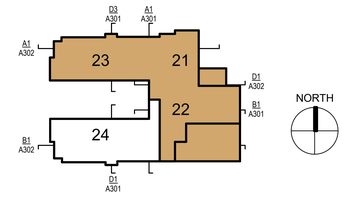
IN ANY SPACE WHERE FINISHES ARE NOT DESIGNATED, ASSUME THE FOLLOWING FINISHES:

B2 4" RUBBER BASE
F1 CARPET TILES - GENERAL FIELD - LAID IN LINEAR BRICK PATTERN
W1: PRIMED & PAINTED WALL - GENERAL COLOR - EPOXY PAINT IN WE/DAMP AREAS
W3: SEALED CMU WHERE CMU IS PRESENT

GENERAL FINISH NOTES

1. PROVIDE EPOXY PAINT AT ALL RESTROOMS, SHOWERS, LOCKER ROOMS AND JANITOR CLOSETS.
2. ALL PAINTED STEEL BRACING AND COLUMNS TO BE PAINTED, UNLESS NOTED OTHERWISE.
3. AT SOFFITS RECEIVING COLOR - PAINT ALL SIDES OF SOFFIT.
4. ALL METAL GUARDRAILS AND STAIR STRINGERS TO BE PAINTED SEE FINISH SCHEDULE FOR H.M. DOOR AND FRAME PAINT COLORS.
5. ALL EXPOSED CEILINGS TO BE PAINTED. REFER TO REFLECTED CEILING PLANS.
6. ALL FLOOR TRANSITIONS TO BE LOCATED AT CENTER OF DOOR, U.N.O. ALL FLOOR TRANSITIONS AT FLOOR TILE (T1) LOCATIONS TO BE LOCATED AT INSIDE CORNER OF DOOR.
7. PROVIDE FLOOR FINISH 'RT': RUBBER STAIR TREAD' AT STAIR TREADS AND LANDING.
8. PROVIDE A SMOOTH TRANSITION AT ALL FLOOR MATERIALS - CONTRACTOR TO INSTALL ALL FLOOR FINISHES AT SAME LEVEL, DESPITE DIFFERENT THICKNESS. PROVIDE FLOOR TRANSITION WHERE OCCURS.
9. SEE SHEET AXXX FOR FLOORING TRANSITION DETAILS.
10. SEE ELEVATION SHEETS FOR ALL WALL TILE PATTERNS.
11. PROVIDE TILE 4"X4" CERAMIC WALL TILE AT ALL JANITOR SINKS UNLESS NOTED OTHERWISE. PROVIDE TILE BULLNOSE TO FINISH OFF ALL EXPOSED EDGES.
12. ALL WALLS RECEIVING TILE WAINSCOT TO RECEIVE PAINT P1 ABOVE, U.N.O. SEE FINISH PLANS FOR ACCENT WALL LOCATIONS.
13. ALL GROUT JOINTS TO BE NO LARGER THAN 1/8".
14. PROVIDE 'CG: CORNER GUARD' AT ALL LOCATIONS WHERE TILE WAINSCOT WRAPS GYP. BD. CORNERS. CAP ALL TILE WAINSCOT WITH SCHLUTER STRIP (SL).
15. AT ALL TILE WAINSCOT, SCRIBE BOTTOM TILE TO MATCH FINISH FLOOR SURFACE AND CAULK WITH BASE 'RB'.
16. FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION OF MILLWORK.
17. COORDINATE ALL MILLWORK WITH APPLIANCES BEFORE FABRICATION.
18. ALL COUNTERTOP, BACKSPLASHES, AND EDGE BANDING TO HAVE COORDINATING FINISHES.
19. ALL WOOD TRIM TO BE STAINED TO MATCH DOOR STAIN.

KEY PLAN - UPPER LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH · SHERRY CHO · 7067969 · LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01
7	11/27/2023	BP5-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 24 ENLARGED FINISH PLAN - LEVEL 02

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HEADER SCHEDULE

H1	GYP. HEADER
H2	MASONRY HEADER

GENERAL CEILING NOTES

1. REFER TO DETAIL **C6/A530** FOR TYPICAL CEILING SUSPENSION & SEISMIC BRACING
2. REFER TO DETAIL **A6/A530** FOR TYPICAL SUSPENDED GYP. BOARD CEILINGS
3. ALL UNIDENTIFIED CEILING TYPES ON THE PLANS SHALL BE TYPE " A" AT 9'-4" A.F.F.
4. GRID SUSPENSION SYSTEMS SHALL BE CENTERED WITHIN AREAS INDICATED, UNLESS NOTED OTHERWISE
5. PAINT ALL EXPOSED STRUCTURE, MECHANICAL, DUCTS, ELECTRICAL WORK, PIPING, ETC. ALL VISIBLE ELEMENTS TO BE PAINTED AT TYPE "E" & TYPE "F" (ABOVE VENTWOOD)
6. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF MECHANICAL GRILLES, AND TO MECHANICAL DRAWINGS FOR QUANTITIES AND TYPES
7. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF LIGHT FIXTURES AND TO ELECTRICAL DRAWINGS FOR QUANTITY AND TYPES
8. MECHANICAL AND ELECTRICAL CONTRACTORS TO COORDINATE WORK WITH SPRINKLER CONTRACTOR TO AVOID CONFLICTS IN FIELD
9. ALL CEILING HEIGHTS ARE ELEVATION ABOVE TOP OF CONCRETE FLOOR SLAB
10. ALL TYPE C CEILINGS IN RESTROOMS, LOCKER ROOMS, SHOWERS, AND WET AREAS TO BE EPOXY PAINTED.
11. HEADER HEIGHTS TO BE 9'-0" UNO.
12. CEILING TILE SHALL BE LISTED & TESTED ASTM E 84 & HAVE A FLAME SPREAD OF 0-25 & A SMOKE INDEX OF 0-450. IF THE CEIING TILE IS A COMPONENT PART OF A PLENUM SYSTEM THEN IT SHALL BE LISTED & TESTED PER ASTM E 84 & HAVE A FLAME SPREAD F 0-25 & A SMOKE INDEX OF 0-50.

CEILING LEGEND

- A - SUSPENDED 2' X 2' LOOK ACOUSTICAL LAY-IN TILE CEILING
- B - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING
- C - SUSPENDED 5/8" GYP. BD. CEILING SYSTEM - PAINTED (EPOXY PAINT AT WET LOCATIONS)
- D - SUSPENDED 5/8" GYP. CEILING SYSTEM (2 LAYERS) , PAINTED - 1 HOUR RATED
- E - OPEN TO STRUCTURE ABOVE
- F - SUSPENDED 2' X 2' ACOUSTICAL LAY-IN TILE CEILING WITH HOLD DOWN CLIPS
- G - SUSPENDED 2' X 4' ACOUSTICAL LAY-IN TILE CEILING (VINYL COATED)
- H - SUSPENDED WOOD PANEL CEILING SYSTEM
- I - EXTERIOR METAL SOFFIT SYSTEM. APPLY 3" CLOSED CELL SPRAY FOAM INSULATION ON UNDERSIDE OF DECK, WHERE OCCURS.
- J - SPRAY APPLIED ACOUSTICAL TREATMENT ON METAL DECK, WHITE - PAINT ALL BUILDING STRUCTURE, OVERHEAD MEP, ETC TO MATCH INSULATION COLOR

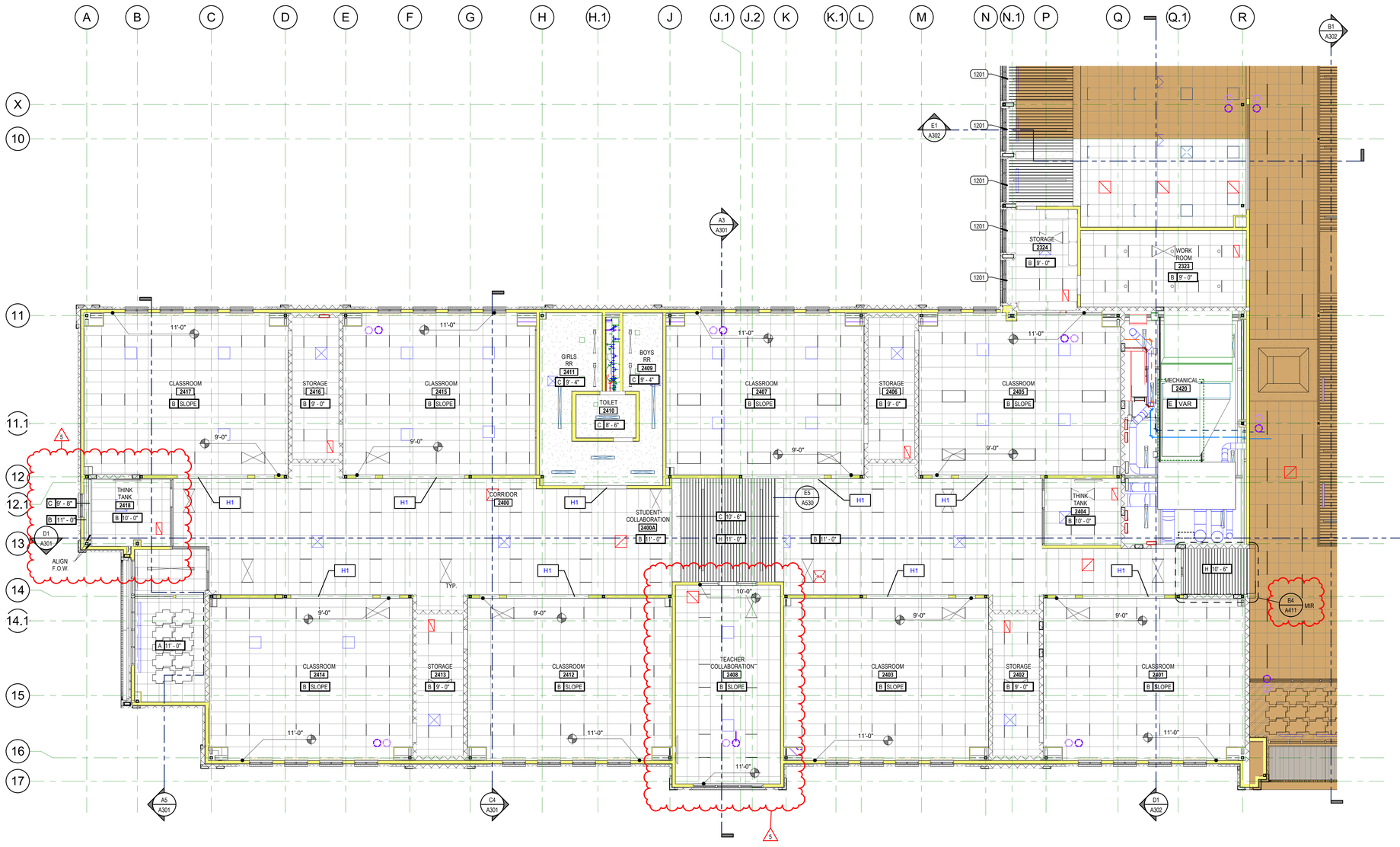
CEILING SYMBOLS

ELECTRICAL

- 2'X4' FLUORESCENT FIXTURE
- 2'X2' FLUORESCENT FIXTURE
- 1'X4' FLUORESCENT FIXTURE
- FLUORESCENT STRIP FIXTURE
- RECESSED DOWN LIGHT
- WALL WASH
- 1'X4' FLUORESCENT FIXTURE
- PENDANT LIGHT FIXTURE
- EXIT SIGN, SINGLE-SIDED
- EXIT SIGN, DOUBLE-SIDED
- FIRE ALARM
- SPEAKER
- SMOKE DETECTOR
- WIRELESS INTERNET

MECHANICAL

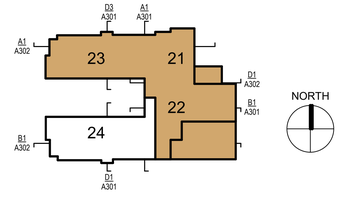
- SUPPLY GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- LINEAR DIFFUSER
- SPRINKLER HEAD - CEILING MOUNT
- SPRINKLER HEAD - WALL MOUNT



KEYED NOTES

1201 MOTORIZED ROLLER WINDOW SHADES

KEY PLAN - UPPER LEVEL



A1 PLAN - LEVEL 02 - RCP 24

SCALE: 1/8" = 1'-0"

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CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — SHANE W. PAY — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 24 ENLARGED REFLECTED CEILING PLAN - LEVEL 02

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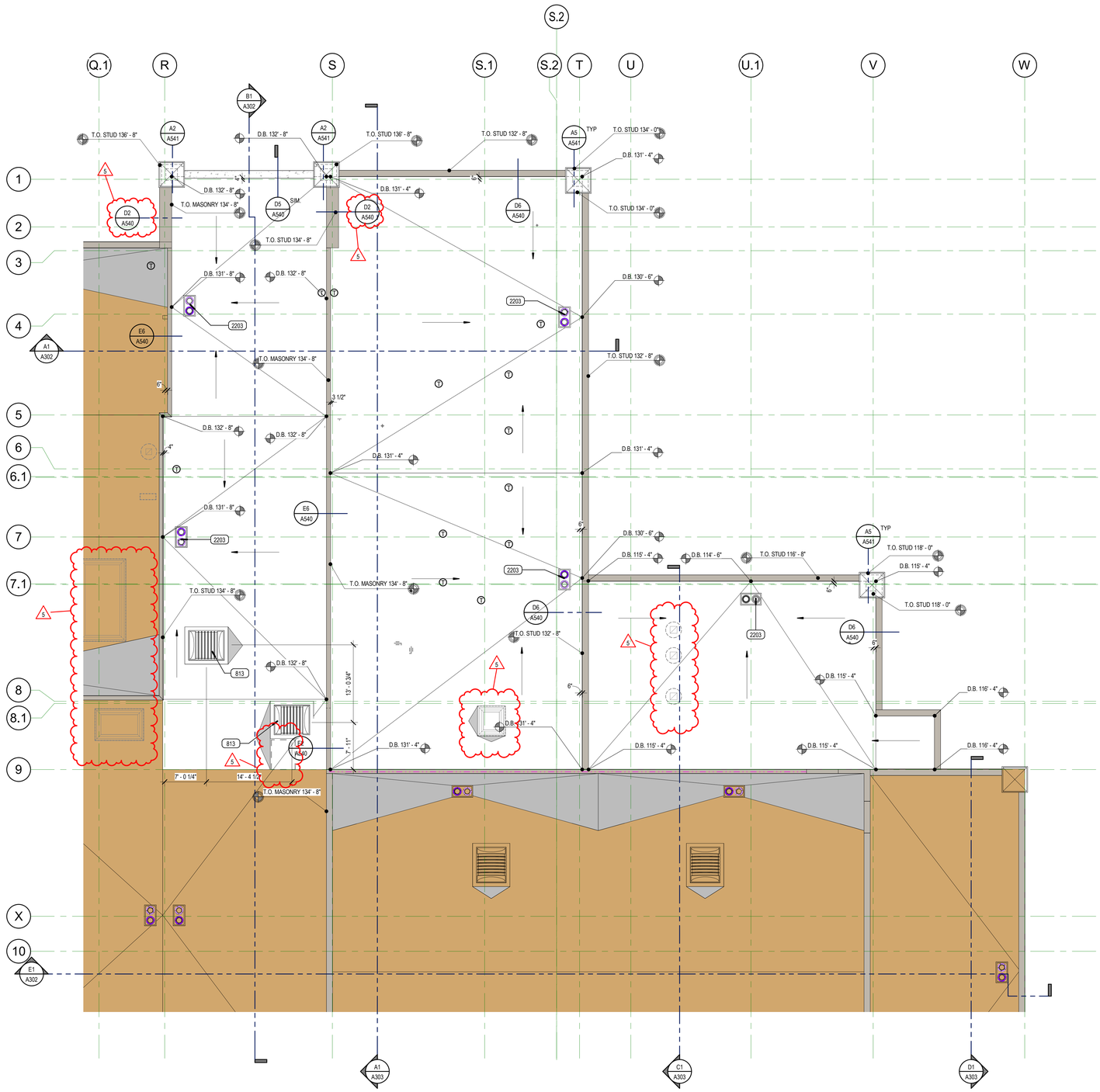


A1 PLAN - ROOF - AREA 31

SCALE: 1/8" = 1'-0"

GENERAL ROOF NOTES

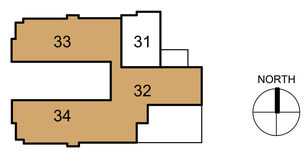
1. ALL ROOF DECK IS TO BE COVERED IN R-35 INSULATION AND SPECIFIED ROOFING SYSTEM.
2. THE CONTRACTOR IS TO ASSURE THAT THE MINIMUM ROOF SLOPE IS NOT LESS THAN 1/4" PER FOOT. ANY AREA THAT IS LESS THAN 1/4" PER FOOT SLOPE SHALL BE ADJUSTED AT THE CONTRACTORS EXPENSE WITH CRICKETING TO PROVIDE THE REQUIRED SLOPE.
3. DECK BEARING ELEVATIONS SHOWN ON THIS SHEET ARE TO BE INCLUDED FOR ARCHITECT'S REFERENCE ON ALL STEEL SHOP DRAWINGS.
4. ALL ROOFING CRICKETS ARE TO BE CONSTRUCTED OF TAPERED INSULATION. CRICKETS ARE TO BE INSTALLED SO THAT A SLOPE OF 1/4" PER FOOT IS MAINTAINED ACROSS THE FACE OF THE CRICKET.
5. PROVIDE CRICKETS AT **ALL** ROOF TOP MOUNTED EQUIPMENT (I.E. SKYLIGHTS, ROOF HATCHES, ETC.) TO ASSURE POSITIVE DRAINAGE AROUND SUCH ELEMENTS.
6. ALL FLASHING, COUNTER FLASHING AND SHEET METAL WORK TO COMPLY WITH THE MINIMUM STANDARDS PER THE CURRENT EDITION OF SMACNA.
7. NOT ALL ROOF MOUNTED EQUIPMENT AND ROOF PENETRATIONS ARE SHOWN ON THE ARCHITECTURAL ROOF PLAN SHEETS. IN ADDITION TO THE ARCHITECTURAL, THE CONTRACTOR IS RESPONSIBLE FOR REFERENCING THE STRUCTURAL, MECHANICAL AND ELECTRICAL DOCUMENTS FOR ALL SUCH OCCURRENCES. ALL PENETRATIONS OF THE ROOF SHALL MEET WITH THE ROOFING MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN INTEGRITY OF ROOFING SYSTEMS.
8. THE CONTRACTOR IS RESPONSIBLE AT BIDDING, FOR PROVIDING A MANUFACTURER'S APPROVED ROOFING DETAIL FOR ALL ROOFING CONDITIONS SO THAT THE SPECIFIED WARRANTY IS OBTAINED. IF A CONDITION SHOWN IN THESE CONSTRUCTION DOCUMENTS DOES NOT MEET THE REQUIREMENTS OF THE ROOFING MANUFACTURER THESE CONDITIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING AND INSTALLATION OF THE APPROVED DETAIL.
9. THE CONTRACTOR IS TO CONFIRM THE ROOFING SYSTEM THICKNESS, INCLUDING THE RIGID INSULATION PRIOR TO INSTALLING CURB AND PARAPET BLOCKING. BLOCKING AND CURB HEIGHTS ARE TO BE ADJUSTED AS NEEDED TO CONFORM TO THE ROOFING THICKNESS TO MEET REQUIREMENTS FOR WARRANTY.
10. WHERE ROOFING MEMBRANE IS SHOWN EXTENDING UP TO THE TOP OF THE PARAPET, THE MEMBRANE IS TO WRAP UP, OVER AND DOWN THE WOOD BLOCKING. THE AIR INFILTRATION BARRIER IS TO EXTEND UP EXTERIOR FACE OF WALL AND FULLY OVER THE TOP OF THE PARAPET WALL AND UNDER THE SILL BLOCK FLASHING. VERIFY WALL TYPE FOR PARAPET CAP WIDTH. SEE DETAILS ON SHEET **A540**. CONTRACTOR TO SEQUENCE WORK TO MEET THIS REQUIREMENT.
11. ALL TOPS OF PARAPETS TO BE PROVIDED WITH 1/2" PER FOOT MINIMUM POSITIVE SLOPE TOWARD THE ROOF FOR ADEQUATE DRAINAGE.
12. ALL PRE-MANUFACTURED MECHANICAL CURBS ARE TO BE MANUFACTURED TO ACCOMMODATE ROOF SLOPE. THEY MUST BE OF ADEQUATE HEIGHT TO ALLOW FOR THE DEPTH OF THE ROOF INSULATION, INCLUDING CRICKETS AND HAVE 8" HEIGHT ABOVE THE ROOF MEMBRANE, SEE DETAIL **E1/A540**.
13. NOT USED.
14. ALL REGLETS ARE TO BE PREFINISHED AND ARE TO BE HELD AS LOW TO THE ROOF AS POSSIBLE, BUT HAVE 8" HEIGHT ABOVE THE ROOF MEMBRANE SO THE VISIBILITY OF THE MEMBRANE FROM THE GROUND BELOW IS MINIMIZED. AT CERTAIN LOCATIONS A SHEET METAL COVER SHEET HAS BEEN DETAILED TO COVER THIS EXPOSED VERTICAL MEMBRANE. **ALL REGLETS AT MASONRY WALLS ARE TO BE EMBEDDED INTO MORTAR JOINTS.** FOR TYPICAL EMBEDDED MASONRY REGLET, SEE DETAIL **A3/A540**. FOR TYPICAL SURFACE MOUNTED FLASHING ON A STUD WALL, SEE DETAIL **D5/A540**.
15. ROOF DRAINS ARE TO BE INSTALLED IN A TWO LEVEL DRAIN BASIN. THE BASIN IS TO BE CONSTRUCTED USING LAYERS OF ROOFING INSULATION. SEE DETAILS **A4, A5 AND A6/A540.**
16. FOR TYPICAL ROOF HATCH AND LADDER, SEE DETAILS **A1, C1,** AND **C2/A540.**
17. FOR TYPICAL ROOF PIPE PENETRATIONS, SEE DETAIL **D1/A540.**

ROOF LEGEND

- SINGLE PLY ROOFING MEMBRANE
- TAPERED INSULATION CRICKET MINIMUM SLOPES: 1/8" ALONG VALLEY, 1/4" ACROSS CRICKET
- PROTECTIVE WALKABLE SURFACE
- DECK RIDGE OR VALLEY
- IMAGINARY VALLEY WITH WARPED DECKING
- AREAS HATCHED AS SUCH SHALL NOT HAVE ANY PENETRATIONS THRU THE ROOF IN ORDER TO MAINTAIN THE CONTINUITY OF THE ASSEMBLY LOCATED BELOW THE DECK (AS PER 2021 IBC SECTION 706.6)
- PRIMARY AND SECONDARY ROOF DRAINS
- PRE-FABRICATED FIXED SKYLIGHT TYPICAL SIZE: 60x72 DIMENSIONED TO THE CENTERS

BID SET 3 TYPICAL NOTE: ROOF PLAN SHEETS INCLUDED FOR DECK BEARING & TOP OF WALL ELEVATIONS AND ROOF SLOPE, TO AID WITH STRUCTURAL STEEL BID PACKAGE 03. SHEETS WILL BE FINALIZED AND ISSUED WITH THE FINAL BID PACKAGE.

KEY PLAN - ROOF



NOTE: ORANGE HATCH COLOR INDICATES AREA NOT SHOWN ON SHEET.

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — JOSEPH KEVIN PETERSEN — 7067868 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	10/06/2023	BP3-ASI-01
5	11/16/2023	BP5-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

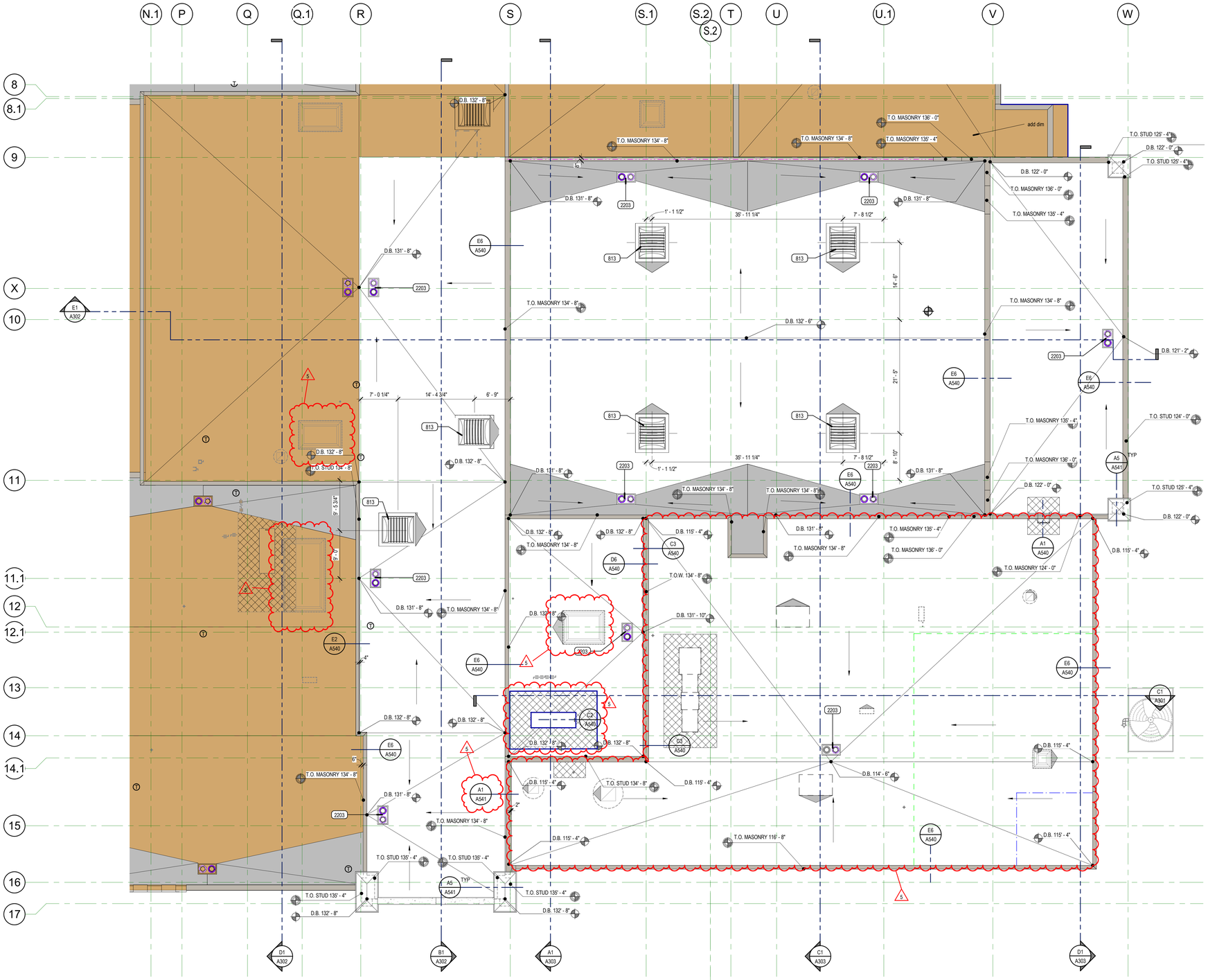
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 31 ROOF PLAN

A131.1

11/17/2023 11:55:52 AM



A1 PLAN - ROOF - AREA 32

SCALE: 1/8" = 1'-0"

GENERAL ROOF NOTES

1. ALL ROOF DECK IS TO BE COVERED IN R-35 INSULATION AND SPECIFIED ROOFING SYSTEM.
2. THE CONTRACTOR IS TO ASSURE THAT THE MINIMUM ROOF SLOPE IS NOT LESS THAN 1/4" PER FOOT. ANY AREA THAT IS LESS THAN 1/4" PER FOOT SLOPE SHALL BE ADJUSTED AT THE CONTRACTORS EXPENSE WITH CRICKETING TO PROVIDE THE REQUIRED SLOPE.
3. DECK BEARING ELEVATIONS SHOWN ON THIS SHEET ARE TO BE INCLUDED FOR ARCHITECT'S REFERENCE ON ALL STEEL SHOP DRAWINGS.
4. ALL ROOFING CRICKETS ARE TO BE CONSTRUCTED OF TAPERED INSULATION. CRICKETS ARE TO BE INSTALLED SO THAT A SLOPE OF 1/4" PER FOOT IS MAINTAINED ACROSS THE FACE OF THE CRICKET.
5. PROVIDE CRICKETS AT **ALL** ROOF TOP MOUNTED EQUIPMENT (I.E. SKYLIGHTS, ROOF HATCHES, ETC.) TO ASSURE POSITIVE DRAINAGE AROUND SUCH ELEMENTS.
6. ALL FLASHING, COUNTER FLASHING AND SHEET METAL WORK TO COMPLY WITH THE MINIMUM STANDARDS PER THE CURRENT EDITION OF SMACNA.
7. NOT ALL ROOF MOUNTED EQUIPMENT AND ROOF PENETRATIONS ARE SHOWN ON THE ARCHITECTURAL ROOF PLAN SHEETS. IN ADDITION TO THE ARCHITECTURAL, THE CONTRACTOR IS RESPONSIBLE FOR REFERENCING THE STRUCTURAL, MECHANICAL AND ELECTRICAL DOCUMENTS FOR ALL SUCH OCCURRENCES. ALL PENETRATIONS OF THE ROOF SHALL MEET WITH THE ROOFING MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN INTEGRITY OF ROOFING SYSTEMS.
8. THE CONTRACTOR IS RESPONSIBLE AT BIDDING, FOR PROVIDING A MANUFACTURER'S APPROVED ROOFING DETAIL FOR ALL ROOFING CONDITIONS SO THAT THE SPECIFIED WARRANTY IS OBTAINED. IF A CONDITION SHOWN IN THESE CONSTRUCTION DOCUMENTS DOES NOT MEET THE REQUIREMENTS OF THE ROOFING MANUFACTURER THESE CONDITIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING AND INSTALLATION OF THE APPROVED DETAIL.
9. THE CONTRACTOR IS TO CONFIRM THE ROOFING SYSTEM THICKNESS, INCLUDING THE RIGID INSULATION PRIOR TO INSTALLING CURB AND PARAPET BLOCKING. BLOCKING AND CURB HEIGHTS ARE TO BE ADJUSTED AS NEEDED TO CONFORM TO THE ROOFING THICKNESS TO MEET REQUIREMENTS FOR WARRANTY.
10. WHERE ROOFING MEMBRANE IS SHOWN EXTENDING UP TO THE TOP OF THE PARAPET, THE MEMBRANE IS TO WRAP UP, OVER AND DOWN THE WOOD BLOCKING. THE AIR INFILTRATION BARRIER IS TO EXTEND UP EXTERIOR FACE OF WALL AND FULLY OVER THE TOP OF THE PARAPET WALL AND UNDER THE SILL BLOCK FLASHING. VERIFY WALL TYPE FOR PARAPET CAP WIDTH, SEE DETAILS ON SHEET **A540**. CONTRACTOR TO SEQUENCE WORK TO MEET THIS REQUIREMENT.
11. ALL TOPS OF PARAPETS TO BE PROVIDED WITH 1/2" PER FOOT MINIMUM POSITIVE SLOPE TOWARD THE ROOF FOR ADEQUATE DRAINAGE.
12. ALL PRE-MANUFACTURED MECHANICAL CURBS ARE TO BE MANUFACTURED TO ACCOMMODATE ROOF SLOPE. THEY MUST BE OF ADEQUATE HEIGHT TO ALLOW FOR THE DEPTH OF THE ROOF INSULATION, INCLUDING CRICKETS AND HAVE 8" HEIGHT ABOVE THE ROOF MEMBRANE, SEE DETAIL **E1/A540**.
13. NOT USED.
14. ALL REGLETS ARE TO BE PREFINISHED AND ARE TO BE HELD AS LOW TO THE ROOF AS POSSIBLE, BUT HAVE 8" HEIGHT ABOVE THE ROOF MEMBRANE SO THE VISIBILITY OF THE MEMBRANE FROM THE GROUND BELOW IS MINIMIZED. AT CERTAIN LOCATIONS A SHEET METAL COVER SHEET HAS BEEN DETAILED TO COVER THIS EXPOSED VERTICAL MEMBRANE. **ALL REGLETS AT MASONRY WALLS ARE TO BE EMBEDDED INTO A MORTAR JOINTS.** FOR TYPICAL EMBEDDED MASONRY REGLET, SEE DETAIL **A3/A540**. FOR TYPICAL SURFACE MOUNTED FLASHING ON A STUD WALL, SEE DETAIL **D5/A540**.
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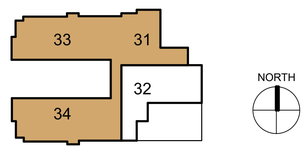
ROOF LEGEND

- SINGLE PLY ROOFING MEMBRANE
- TAPERED INSULATION CRICKET MINIMUM SLOPES: 1/8" ALONG VALLEY, 1/4" ACROSS CRICKET
- PROTECTIVE WALKABLE SURFACE
- DECK RIDGE OR VALLEY
- IMAGINARY VALLEY WITH WARPED DECKING
- AREAS HATCHED AS SUCH SHALL NOT HAVE ANY PENETRATIONS THRU THE ROOF IN ORDER TO MAINTAIN FIRE RESISTIVE ASSEMBLY LOCATED BELOW THE DECK (AS PER 2021 IBC SECTION 706.6).
- PRIMARY AND SECONDARY ROOF DRAINS
- PRE-FABRICATED FIXED SKYLIGHT TYPICAL SIZE: 60x72 DIMENSIONED TO THE CENTERS

BID SET 3 TYPICAL NOTE: ROOF PLAN SHEETS INCLUDED FOR DECK BEARING & TOP OF WALL ELEVATIONS AND ROOF SLOPE, TO AID WITH STRUCTURAL STEEL BID PACKAGE 03. SHEETS WILL BE FINALIZED AND ISSUED WITH THE FINAL BID PACKAGE.

KEY PLAN - ROOF



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CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — SHERI RUSSELL — 7067989 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
1	08/28/2023	BP2 - ADDENDUM 01
2	10/06/2023	BP3-ASI-01
5	11/16/2023	BP5-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

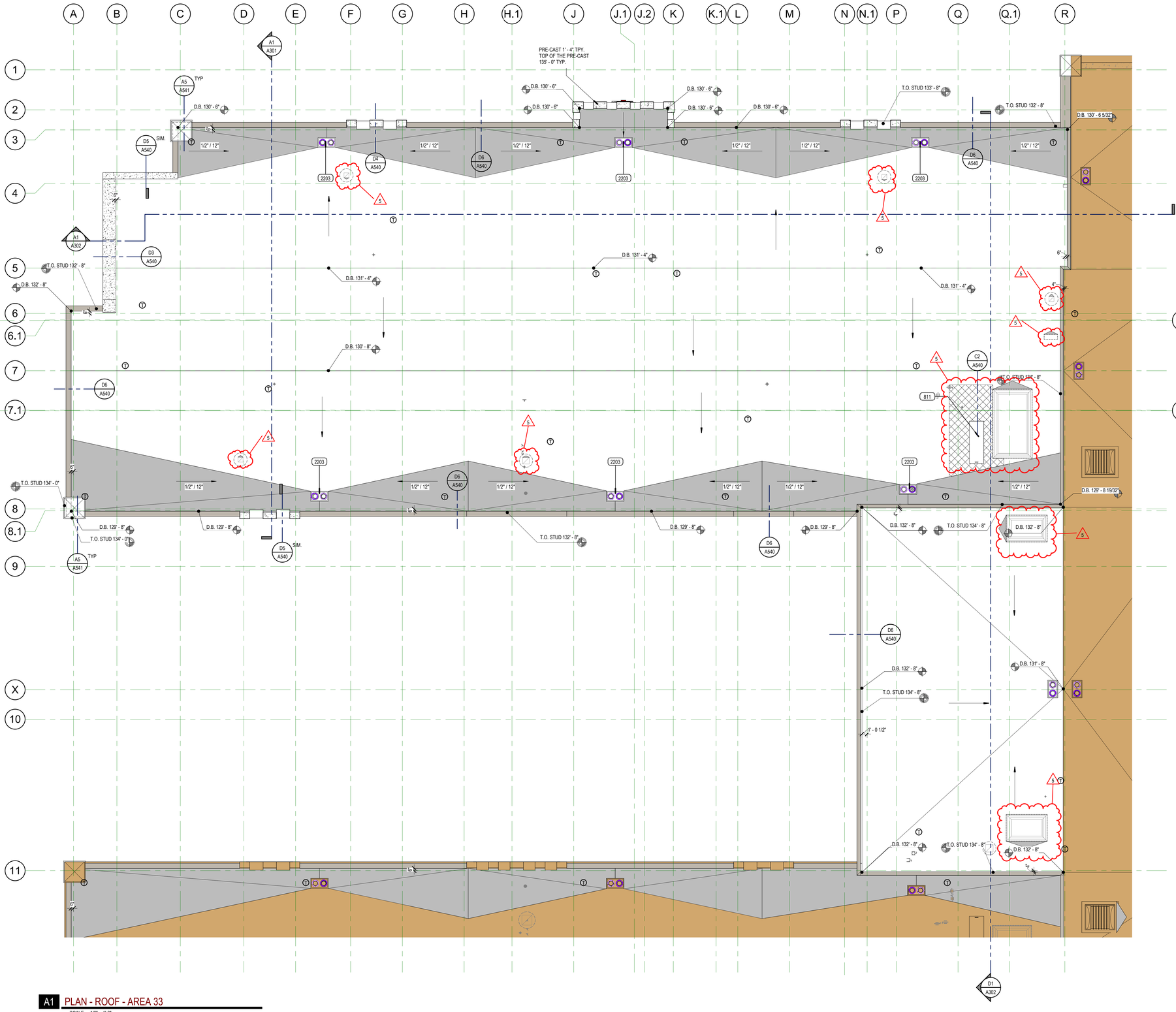
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 32 ROOF PLAN

A132.1

11/17/2023 11:59:56 AM



A1 PLAN - ROOF - AREA 33

SCALE: 1/8" = 1'-0"

GENERAL ROOF NOTES

1. ALL ROOF DECK IS TO BE COVERED IN R-35 INSULATION AND SPECIFIED ROOFING SYSTEM.
2. THE CONTRACTOR IS TO ASSURE THAT THE MINIMUM ROOF SLOPE IS NOT LESS THAN 1/4" PER FOOT. ANY AREA THAT IS LESS THAN 1/4" PER FOOT SLOPE SHALL BE ADJUSTED AT THE CONTRACTORS EXPENSE WITH CRICKETING TO PROVIDE THE REQUIRED SLOPE.
3. DECK BEARING ELEVATIONS SHOWN ON THIS SHEET ARE TO BE INCLUDED FOR ARCHITECT'S REFERENCE ON ALL STEEL SHOP DRAWINGS.
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5. PROVIDE CRICKETS AT **ALL** ROOF TOP MOUNTED EQUIPMENT (I.E. SKYLIGHTS, ROOF HATCHES, ETC.) TO ASSURE POSITIVE DRAINAGE AROUND SUCH ELEMENTS.
6. ALL FLASHING, COUNTER FLASHING AND SHEET METAL WORK TO COMPLY WITH THE MINIMUM STANDARDS PER THE CURRENT EDITION OF SMACNA.
7. NOT ALL ROOF MOUNTED EQUIPMENT AND ROOF PENETRATIONS ARE SHOWN ON THE ARCHITECTURAL ROOF PLAN SHEETS. IN ADDITION TO THE ARCHITECTURAL, THE CONTRACTOR IS RESPONSIBLE FOR REFERENCING THE STRUCTURAL, MECHANICAL AND ELECTRICAL DOCUMENTS FOR ALL SUCH OCCURRENCES. ALL PENETRATIONS OF THE ROOF SHALL MEET WITH THE ROOFING MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN INTEGRITY OF ROOFING SYSTEMS.
8. THE CONTRACTOR IS RESPONSIBLE AT BIDDING, FOR PROVIDING A MANUFACTURER'S APPROVED ROOFING DETAIL FOR ALL ROOFING CONDITIONS SO THAT THE SPECIFIED WARRANTY IS OBTAINED. IF A CONDITION SHOWN IN THESE CONSTRUCTION DOCUMENTS DOES NOT MEET THE REQUIREMENTS OF THE ROOFING MANUFACTURER THESE CONDITIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING AND INSTALLATION OF THE APPROVED DETAIL.
9. THE CONTRACTOR IS TO CONFIRM THE ROOFING SYSTEM THICKNESS, INCLUDING THE RIGID INSULATION PRIOR TO INSTALLING CURB AND PARAPET BLOCKING. BLOCKING AND CURB HEIGHTS ARE TO BE ADJUSTED AS NEEDED TO CONFORM TO THE ROOFING THICKNESS TO MEET REQUIREMENTS FOR WARRANTY.
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13. NOT USED.
14. ALL REGLETS ARE TO BE PREFINISHED AND ARE TO BE HELD AS LOW TO THE ROOF AS POSSIBLE, BUT HAVE 8" HEIGHT ABOVE THE ROOF MEMBRANE SO THE VISIBILITY OF THE MEMBRANE FROM THE GROUND BELOW IS MINIMIZED. AT CERTAIN LOCATIONS A SHEET METAL COVER SHEET HAS BEEN DETAILED TO COVER THIS EXPOSED VERTICAL MEMBRANE. **ALL REGLETS AT MASONRY WALLS ARE TO BE EMBEDDED INTO MORTAR JOINTS.** FOR TYPICAL EMBEDDED MASONRY REGLET, SEE DETAIL **A3/A540**. FOR TYPICAL SURFACE MOUNTED FLASHING ON A STUD WALL, SEE DETAIL **D5/A540**.
15. ROOF DRAINS ARE TO BE INSTALLED IN A TWO LEVEL DRAIN BASIN. THE BASIN IS TO BE CONSTRUCTED USING LAYERS OF ROOFING INSULATION. SEE DETAILS **A4, A5 AND A6/A540**.
16. FOR TYPICAL ROOF HATCH AND LADDER, SEE DETAILS **A1, C1, AND C2/A540**.
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ROOF LEGEND

- SINGLE PLY ROOFING MEMBRANE
- TAPERED INSULATION CRICKET MINIMUM SLOPES: 1/8" ALONG VALLEY, 1/4" ACROSS CRICKET
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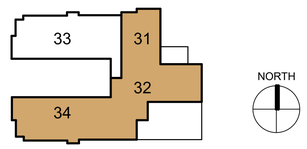
- PRIMARY AND SECONDARY ROOF DRAINS
- PRE-FABRICATED FIXED SKYLIGHT
  TYPICAL SIZE: 60x72
  DIMENSIONED TO THE CENTERS

BID SET 3 TYPICAL NOTE: ROOF PLAN SHEETS INCLUDED FOR DECK BEARING & TOP OF WALL ELEVATIONS AND ROOF SLOPE, TO AID WITH STRUCTURAL STEEL BID PACKAGE 03. SHEETS WILL BE FINALIZED AND ISSUED WITH THE FINAL BID PACKAGE.

KEY PLAN - ROOF



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — JOSEPH M. WOLF — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
1	08/28/2023	BP2 - ADDENDUM 01
2	10/06/2023	BP3-ASI-01
5	11/16/2023	BP5-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

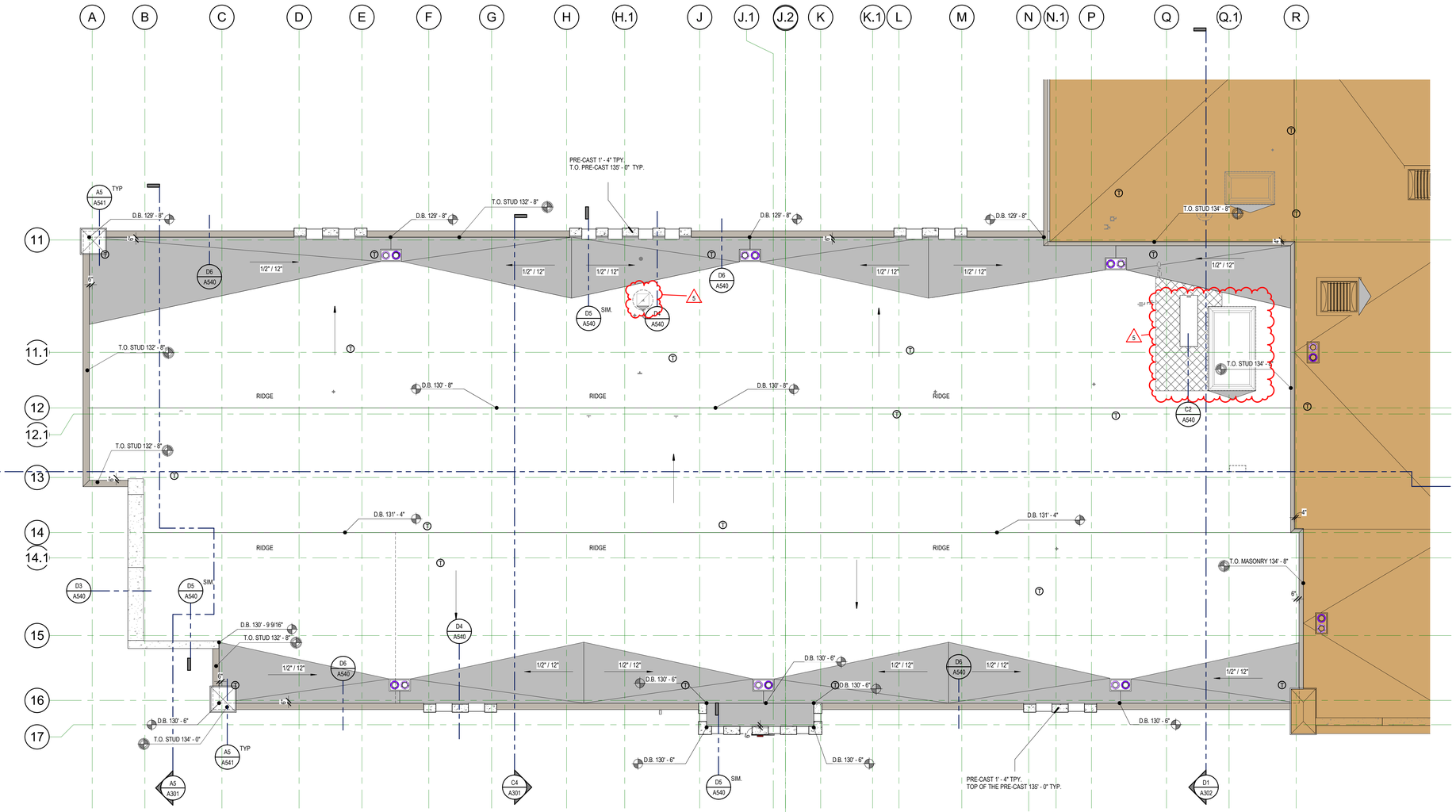
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 33 ROOF PLAN

A133.1

11/17/2023 11:56:00 AM



A1 PLAN - ROOF - AREA 34

SCALE: 1/8" = 1'-0"

GENERAL ROOF NOTES

1. ALL ROOF DECK IS TO BE COVERED IN R-35 INSULATION AND SPECIFIED ROOFING SYSTEM.
2. THE CONTRACTOR IS TO ASSURE THAT THE MINIMUM ROOF SLOPE IS NOT LESS THAN 1/4" PER FOOT. ANY AREA THAT IS LESS THAN 1/4" PER FOOT SLOPE SHALL BE ADJUSTED AT THE CONTRACTORS EXPENSE WITH CRICKETING TO PROVIDE THE REQUIRED SLOPE.
3. DECK BEARING ELEVATIONS SHOWN ON THIS SHEET ARE TO BE INCLUDED FOR ARCHITECT'S REFERENCE ON ALL STEEL SHOP DRAWINGS.
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8. THE CONTRACTOR IS RESPONSIBLE AT BIDDING, FOR PROVIDING A MANUFACTURER'S APPROVED ROOFING DETAIL FOR ALL ROOFING CONDITIONS SO THAT THE SPECIFIED WARRANTY IS OBTAINED. IF A CONDITION SHOWN IN THESE CONSTRUCTION DOCUMENTS DOES NOT MEET THE REQUIREMENTS OF THE ROOFING MANUFACTURER THESE CONDITIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING AND INSTALLATION OF THE APPROVED DETAIL.
9. THE CONTRACTOR IS TO CONFIRM THE ROOFING SYSTEM THICKNESS, INCLUDING THE RIGID INSULATION PRIOR TO INSTALLING CURB AND PARAPET BLOCKING. BLOCKING AND CURB HEIGHTS ARE TO BE ADJUSTED AS NEEDED TO CONFORM TO THE ROOFING THICKNESS TO MEET REQUIREMENTS FOR WARRANTY.
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13. NOT USED.
14. ALL REGLETS ARE TO BE PREFINISHED AND ARE TO BE HELD AS LOW TO THE ROOF AS POSSIBLE, BUT HAVE 8" HEIGHT ABOVE THE ROOF MEMBRANE SO THE VISIBILITY OF THE MEMBRANE FROM THE GROUND BELOW IS MINIMIZED. AT CERTAIN LOCATIONS A SHEET METAL COVER SHEET HAS BEEN DETAILED TO COVER THIS EXPOSED VERTICAL MEMBRANE. **ALL REGLETS AT MASONRY WALLS ARE TO BE EMBEDDED INTO THE MORTAR JOINTS.** FOR TYPICAL EMBEDDED MASONRY REGLET, SEE DETAIL **A3/A540**. FOR TYPICAL SURFACE MOUNTED FLASHING ON A STUD WALL, SEE DETAIL **D5/A540**.
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ROOF LEGEND

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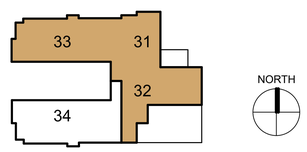
KEY PLAN - ROOF



NOTE: ORANGE HATCH COLOR INDICATES AREA NOT SHOWN ON SHEET.

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STATE OF UTAH REGISTERED ARCHITECT 7067969 LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
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2	10/06/2023	BP3-ASI-01
5	11/16/2023	BP5-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

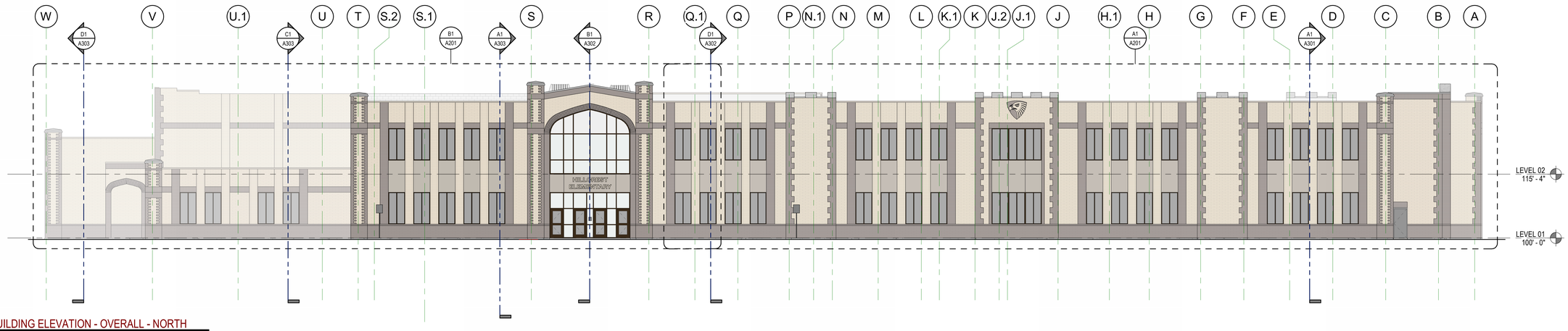
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 34 ROOF PLAN

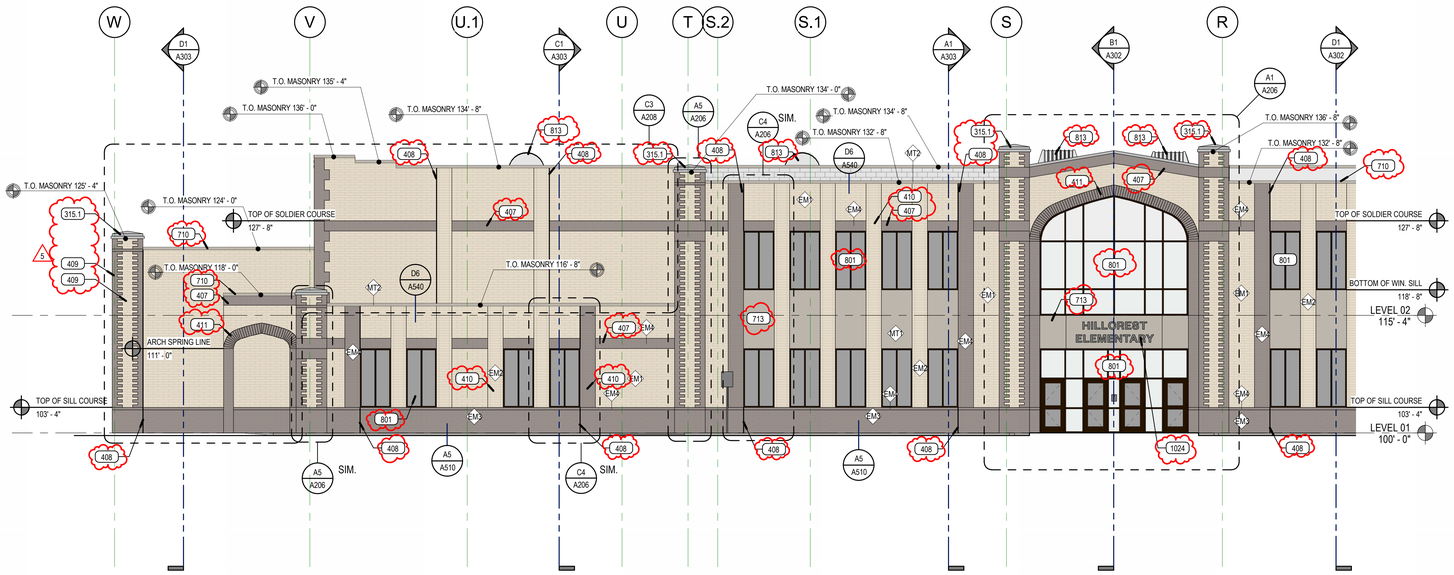
A134.1

11/17/2023 11:56:04 AM



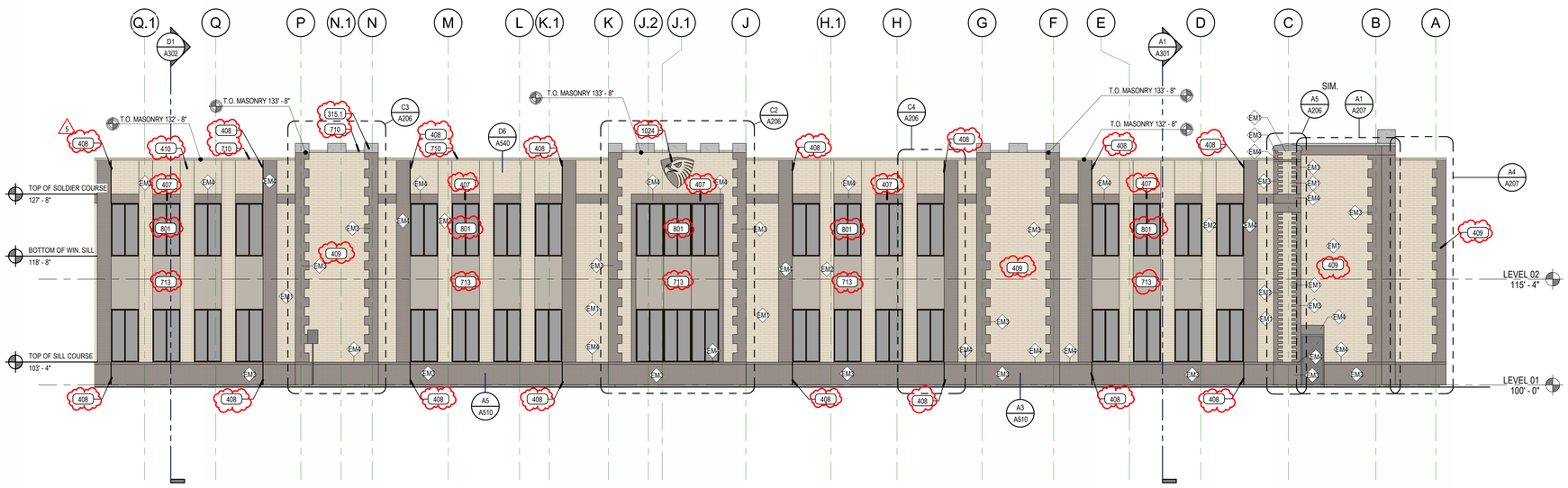
C1 BUILDING ELEVATION - OVERALL - NORTH

SCALE: 3/32" = 1'-0"



B1 ELEVATION - NORTH A

SCALE: 1/8" = 1'-0"



A1 ELEVATION - NORTH B

SCALE: 1/8" = 1'-0"

EXT. FINISH LEGEND

MARK	DESCRIPTION	MANUFACTURER	NAME	COLOR	COMMENTS
EM1	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM2	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	STACKED BOND - MORTAR COLOR: C.S.B.A.
EM3	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM4	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	STACKED BOND - MORTAR COLOR: C.S.B.A.
MT1	METAL PANEL	ALPOLIC		CHAMPAGNE METALLIC	WALL PANELS
MT2	METAL FLASHING/COPING			C.S.B.A.	
PC1	PRECAST CONCRETE			CLEAR	

KEYED NOTES

315.1	CONCRETE TOWER CAP
407	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, SOLDIER COURSE
408	MASONRY CONTROL JOINTS
409	4"X4"X16" INTEGRAL COLOR CMU, HONED, RUNNING BOND
410	4"X4"X16" INTEGRAL COLOR CMU, HONED, HORIZONTAL STACKED
411	4"X4"X16" INTEGRAL COLOR CMU , SOLDIER COARSE ARCH
710	PRE-FINISHED CONT. METAL CAP & CLEAT OVER (2) 2X PRE-TREATED NAILER. PRE-FINISHED CONT. METAL EDGE & CLEAT
713	PRE-FINISHED EXTERIOR ACM PANEL SYSTEM. SEE EXTERIOR ELEVATIONS FOR TYPES & FINISHES
801	WINDOW SYSTEM
813	UNIT SKYLIGHT, 60"x72"
1024	SIGNAGE, SEE SCHEDULE

KEY PLAN - ELEVATIONS

NORTH

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DATE: NOVEMBER 16 2023

STATE OF UTAH
DAVID SHERWINDT
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BP5-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

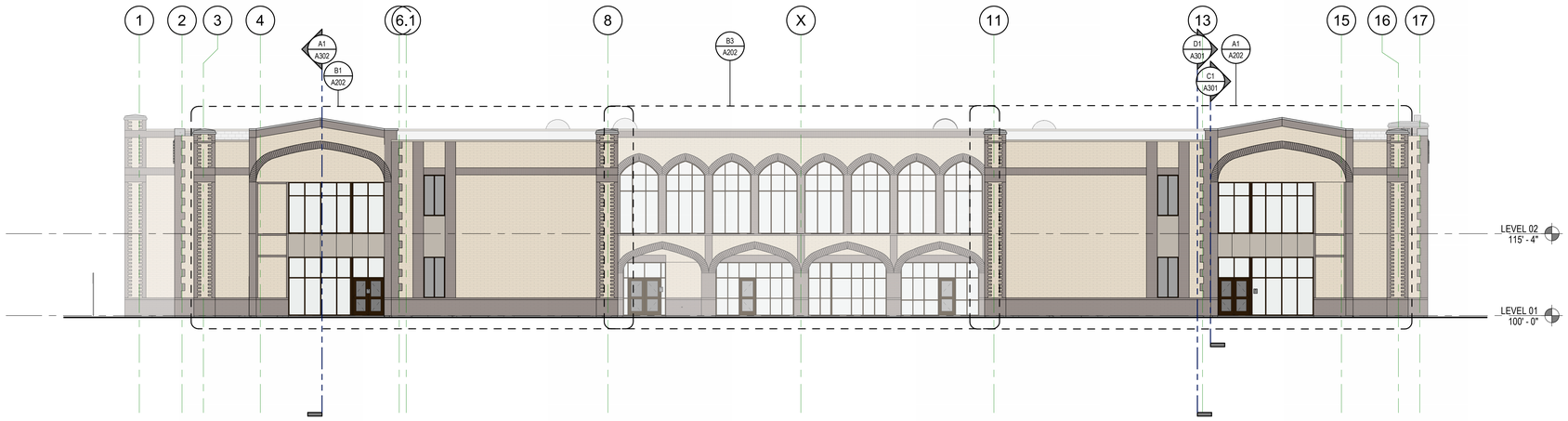
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

EXTERIOR ELEVATIONS

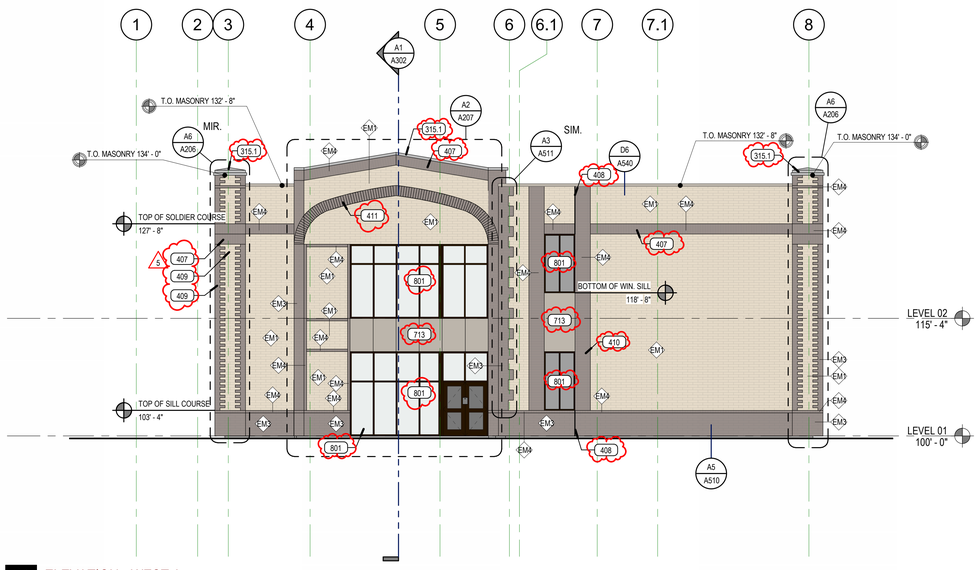
A201

11/17/2023 12:46:12 PM



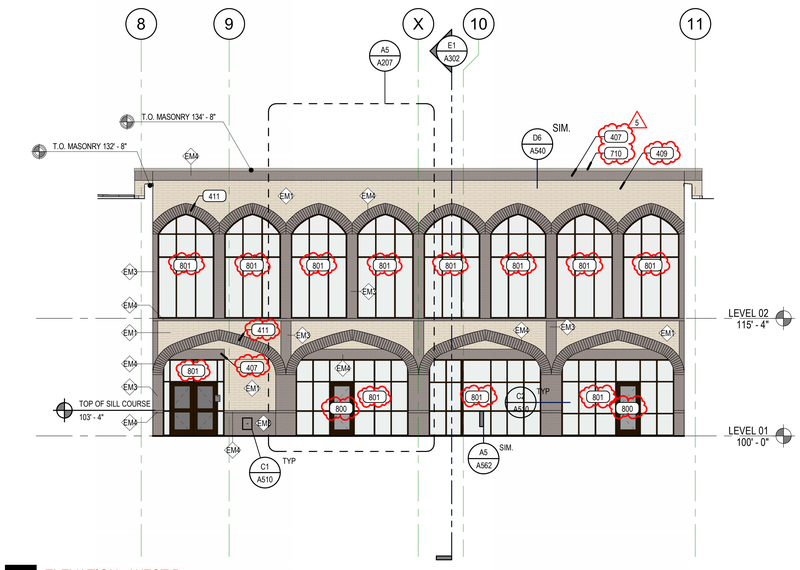
D1 BUILDING ELEVATION - OVERALL - WEST

SCALE: 3/32" = 1'-0"



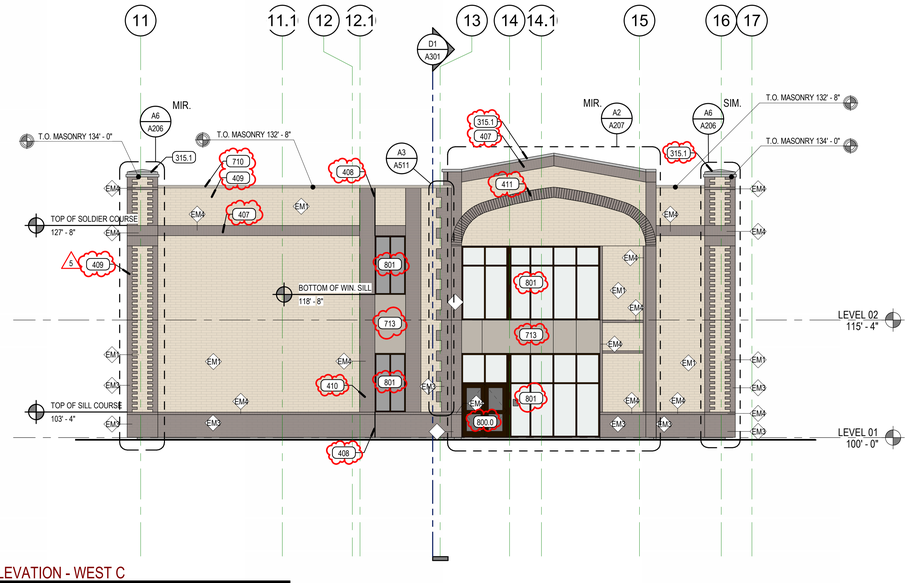
B1 ELEVATION - WEST A

SCALE: 1/8" = 1'-0"



B3 ELEVATION - WEST B

SCALE: 1/8" = 1'-0"



A1 ELEVATION - WEST C

SCALE: 1/8" = 1'-0"

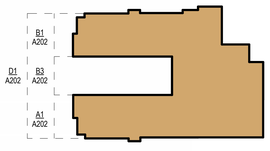
EXT. FINISH LEGEND

MARK	DESCRIPTION	MANUFACTURER	NAME	COLOR	COMMENTS
EM1	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM2	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	STACKED BOND - MORTAR COLOR: C.S.B.A.
EM3	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM4	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	STACKED BOND - MORTAR COLOR: C.S.B.A.
MT1	METAL PANEL	ALPOLIC		CHAMPAGNE METALLIC	WALL PANELS
MT2	METAL FLASHING/COPING			C.S.B.A.	
PC1	PRECAST CONCRETE			CLEAR	

KEYED NOTES

315.1	CONCRETE TOWER CAP
407	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, SOLDIER COURSE
408	MASONRY CONTROL JOINTS
409	4"X4"X16" INTEGRAL COLOR CMU, HONED, RUNNING BOND
410	4"X4"X16" INTEGRAL COLOR CMU, HONED, HORIZONTAL STACKED
411	4"X4"X16" INTEGRAL COLOR CMU , SOLDIER COURSE ARCH
710	PRE-FINISHED CONT. METAL CAP & CLEAT OVER (2) 2X PRE-TREATED NAILER. PRE-FINISHED CONT. METAL EDGE & CLEAT
713	PRE-FINISHED EXTERIOR ACM PANEL SYSTEM. SEE EXTERIOR ELEVATIONS FOR TYPES & FINISHES
800	DOOR & FRAME
800.0	
801	WINDOW SYSTEM

KEY PLAN - ELEVATIONS



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STATE OF UTAH — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

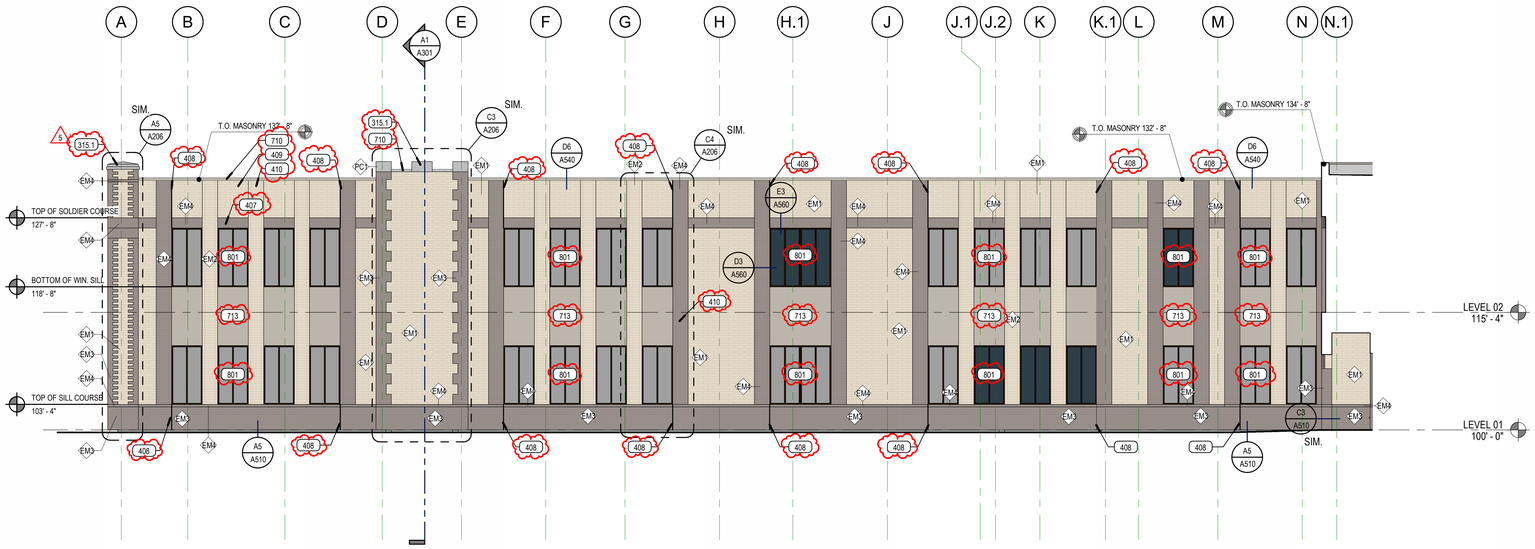
EXTERIOR ELEVATIONS

A202

11/17/2023 12:46:23 PM

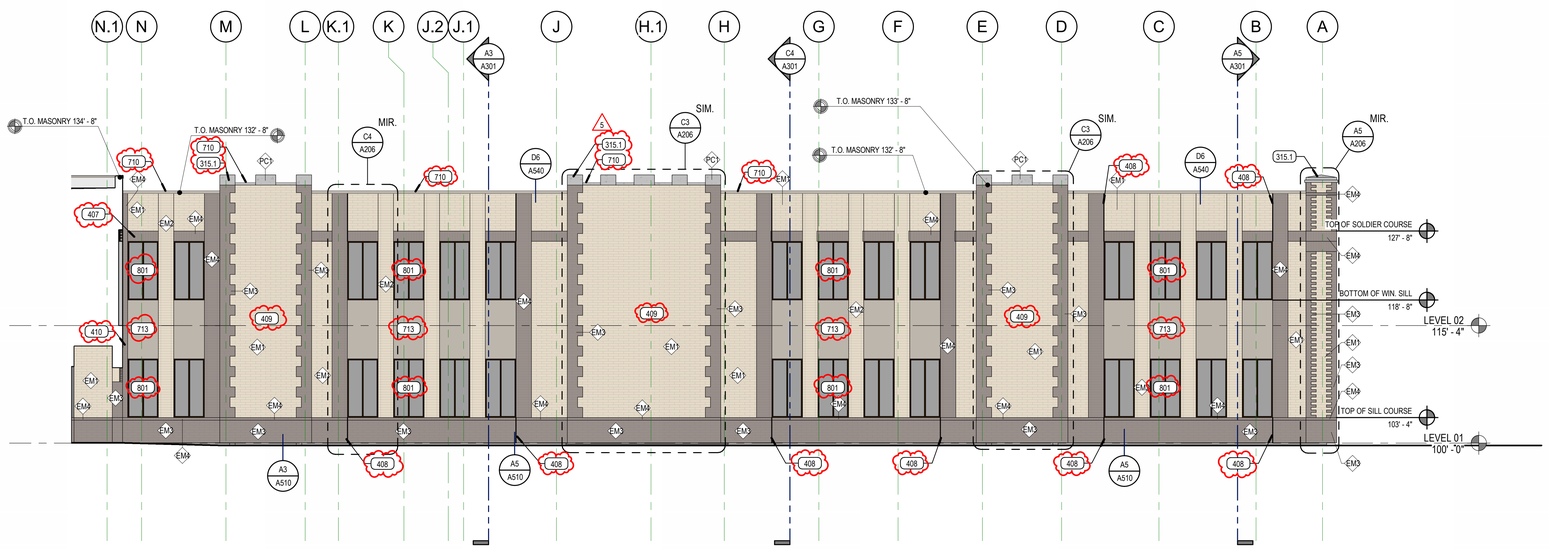
EXT. FINISH LEGEND

MARK	DESCRIPTION	MANUFACTURER	NAME	COLOR	COMMENTS
EM1	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM2	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	STACKED BOND - MORTAR COLOR: C.S.B.A.
EM3	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM4	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	STACKED BOND - MORTAR COLOR: C.S.B.A.
MT1	METAL PANEL	ALPOLIC		CHAMPAGNE METALLIC	WALL PANELS
MT2	METAL FLASHING/COPING			C.S.B.A.	
PC1	PRECAST CONCRETE			CLEAR	



B1 ELEVATION - COURTYARD - NORTH WING - SOUTH

SCALE: 1/8" = 1'-0"



A1 ELEVATION - COURTYARD - SOUTH WING - NORTH

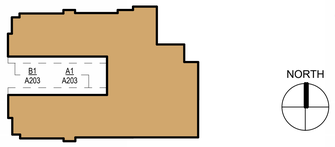
SCALE: 1/8" = 1'-0"

KEYED NOTES

315.1	CONCRETE TOWER CAP
407	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, SOLDIER COURSE
408	MASONRY CONTROL JOINTS
409	4"X4"X16" INTEGRAL COLOR CMU, HONED, RUNNING BOND
410	4"X4"X16" INTEGRAL COLOR CMU, HONED, HORIZONTAL STACKED
710	PRE-FINISHED CONT. METAL CAP & CLEAT OVER (2) 2X PRE-TREATED NAILER. PRE-FINISHED CONT. METAL EDGE & CLEAT
713	PRE-FINISHED EXTERIOR ACM PANEL SYSTEM. SEE EXTERIOR ELEVATIONS FOR TYPES & FINISHES
801	WINDOW SYSTEM

5

KEY PLAN - ELEVATIONS



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BP5-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

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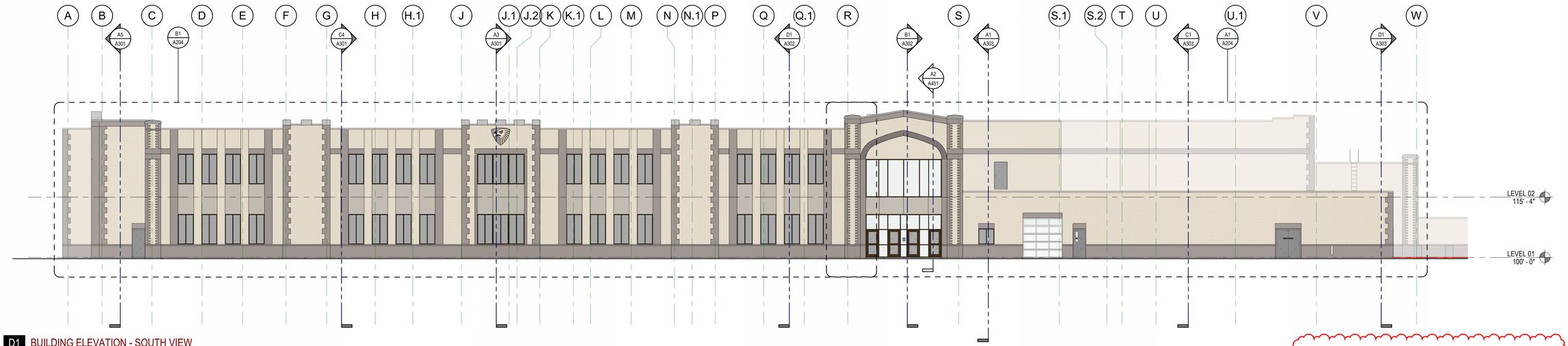
BID PACKAGE 5 - GENERAL CONSTRUCTION

EXTERIOR ELEVATIONS

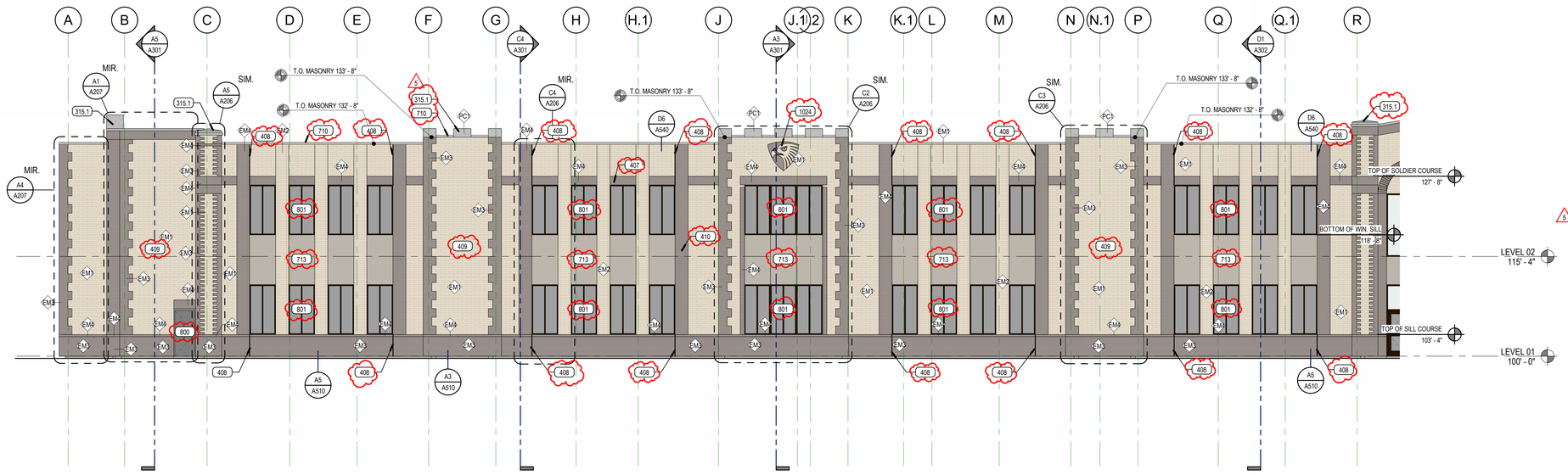
A203

11/17/2023 12:46:30 PM



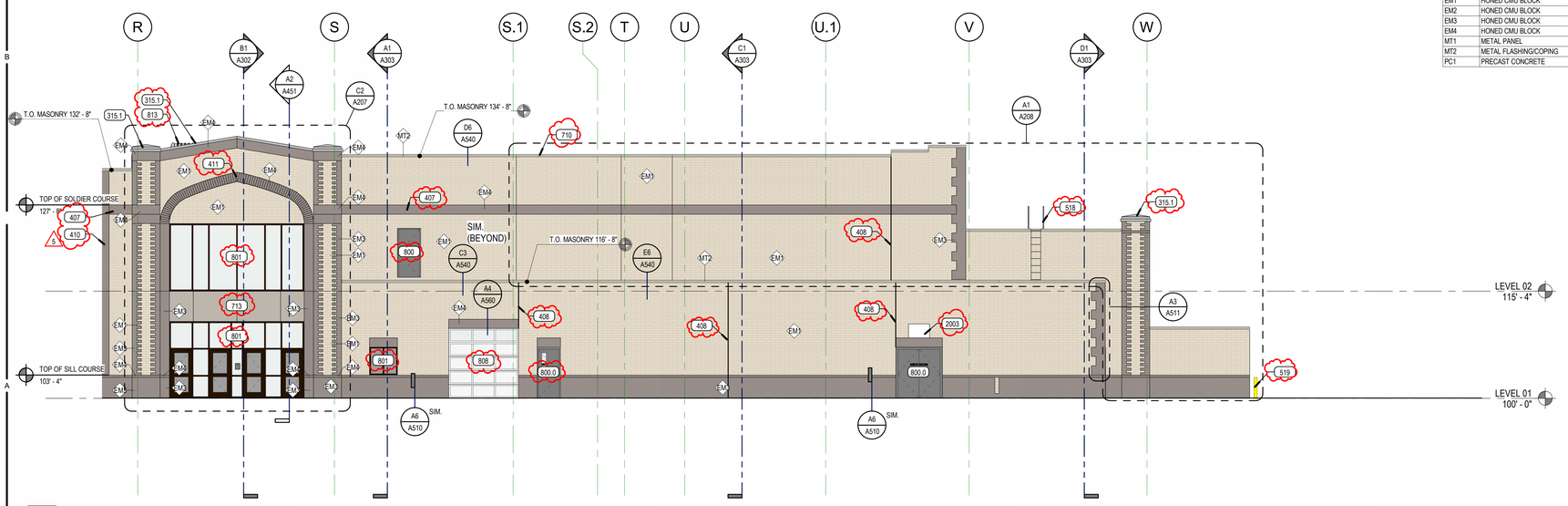
D1 BUILDING ELEVATION - SOUTH VIEW

SCALE: 3/32" = 1'-0"



B1 ELEVATION - SOUTH A

SCALE: 1/8" = 1'-0"



A1 ELEVATION - SOUTH B

SCALE: 1/8" = 1'-0"

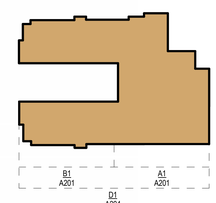
KEYED NOTES

315.1	CONCRETE TOWER CAP
407	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, SOLDIER COURSE
408	MASONRY CONTROL JOINTS
409	4"X4"X16" INTEGRAL COLOR CMU, HONED, RUNNING BOND
410	4"X4"X16" INTEGRAL COLOR CMU, HONED, HORIZONTAL STACKED
411	4"X4"X16" INTEGRAL COLOR CMU , SOLDIER COARSE ARCH
518	STEEL LADDER
519	STEEL PIPE BOLLARD, PAINTED, SEE DETAIL A2/AS810
710	PRE-FINISHED CONT. METAL CAP & CLEAT OVER (2) 2X PRE-TREATED NAILER. PRE-FINISHED CONT. METAL EDGE & CLEAT
713	PRE-FINISHED EXTERIOR ACM PANEL SYSTEM. SEE EXTERIOR ELEVATIONS FOR TYPES & FINISHES
800	DOOR & FRAME
800.0	
801	WINDOW SYSTEM
808	OVERHEAD SECTIONAL PANEL DOOR, MOTORIZED, SEE ELEVATION FOR PANEL MATERIAL
813	UNIT SKYLIGHT, 60"x72"
1024	SIGNAGE, SEE SCHEDULE
2003	MECHANICAL GRILLE

EXT. FINISH LEGEND

MARK	DESCRIPTION	MANUFACTURER	NAME	COLOR	COMMENTS
EM1	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM2	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	STACKED BOND - MORTAR COLOR: C.S.B.A.
EM3	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM4	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	STACKED BOND - MORTAR COLOR: C.S.B.A.
MT1	METAL PANEL	ALPOLIC		CHAMPAGNE METALLIC	WALL PANELS
MT2	METAL FLASHING/COPING			C.S.B.A.	
PC1	PRECAST CONCRETE			CLEAR	

KEY PLAN - ELEVATIONS



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REGISTERED
7067869
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

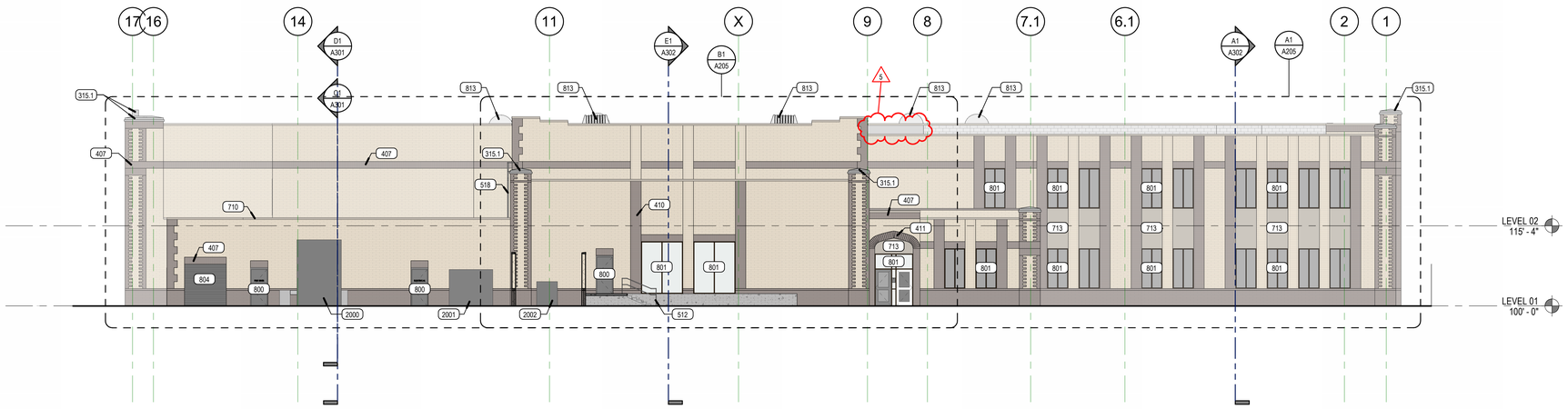
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

EXTERIOR ELEVATIONS

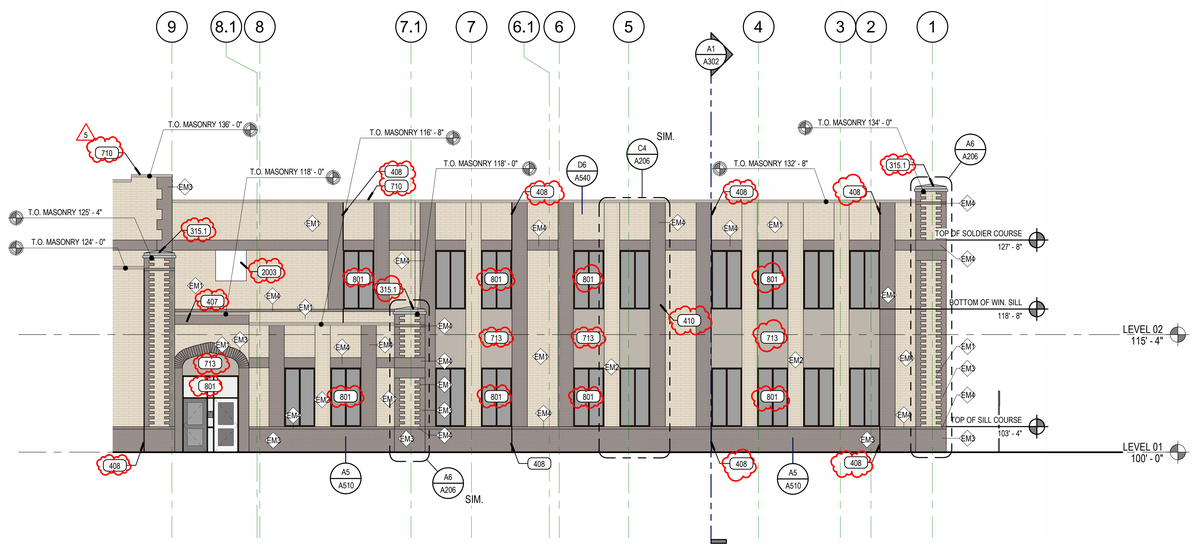
A204

11/17/2023 12:46:39 PM



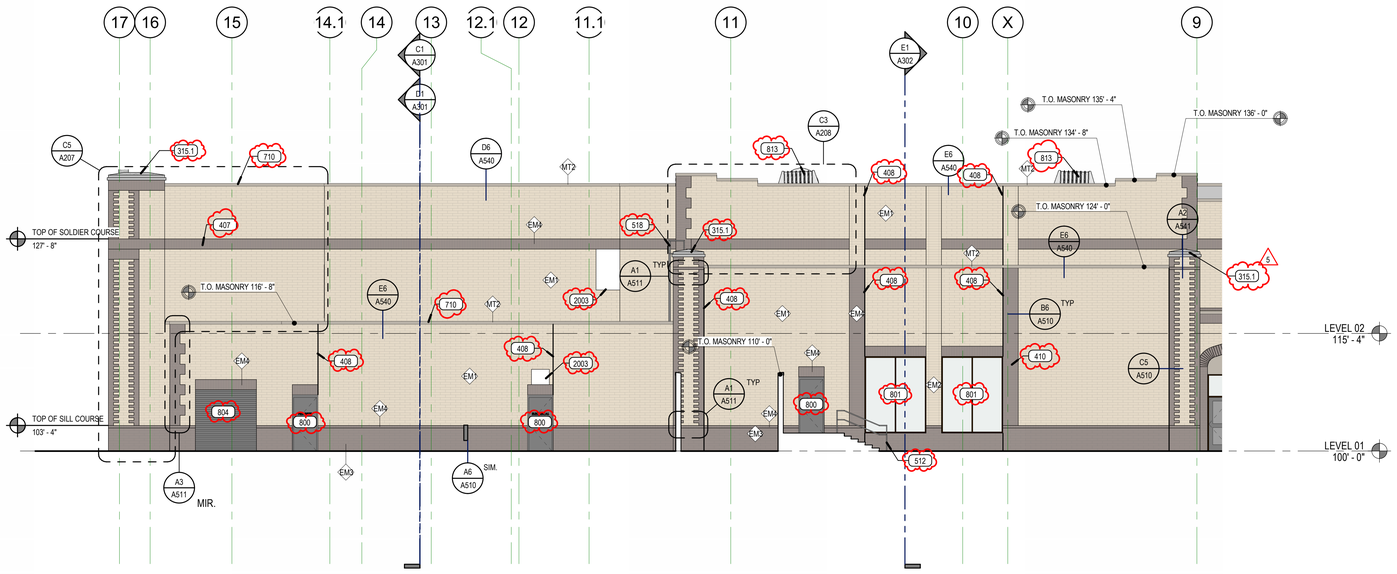
D1 BUILDING ELEVATION - EAST VIEW

SCALE: 3/32" = 1'-0"



B1 ELEVATION - EAST A

SCALE: 1/8" = 1'-0"



A1 ELEVATION - EAST B

SCALE: 1/8" = 1'-0"

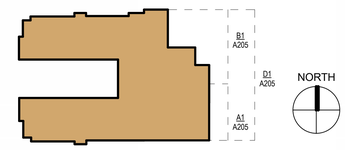
EXT. FINISH LEGEND

MARK	DESCRIPTION	MANUFACTURER	NAME	COLOR	COMMENTS
EM1	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM2	HONED CMU BLOCK	AMCOR	HONED	AMBER GREY	STACKED BOND - MORTAR COLOR: C.S.B.A.
EM3	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	RUNNING BOND - MORTAR COLOR: C.S.B.A.
EM4	HONED CMU BLOCK	AMCOR	HONED	PALOMINO	STACKED BOND - MORTAR COLOR: C.S.B.A.
MT1	METAL PANEL	ALPOLIC		CHAMPAGNE METALLIC	WALL PANELS
MT2	METAL FLASHING/COPING			C.S.B.A.	
PC1	PRECAST CONCRETE			CLEAR	

KEYED NOTES

315.1	CONCRETE TOWER CAP
407	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, SOLDIER COURSE
408	MASONRY CONTROL JOINTS
410	4"X4"X16" INTEGRAL COLOR CMU, HONED, HORIZONTAL STACKED
411	4"X4"X16" INTEGRAL COLOR CMU , SOLDIER COARSE ARCH
512	1 1/2" STEEL PIPE GAURDRAIL PAINTED TYP.
518	STEEL LADDER
710	PRE-FINISHED CONT. METAL CAP & CLEAT OVER (2) 2X PRE-TREATED NAILER. PRE-FINISHED CONT. METAL EDGE & CLEAT
713	PRE-FINISHED EXTERIOR ACM PANEL SYSTEM. SEE EXTERIOR ELEVATIONS FOR TYPES & FINISHES
800	DOOR & FRAME
801	WINDOW SYSTEM
804	OVERHEAD COILING DOOR
813	UNIT SKYLIGHT, 60"x72"
2000	COOLING TOWER
2001	CT CAN
2002	MECHANICAL GENERATOR
2003	MECHANICAL GRILLE

KEY PLAN - ELEVATIONS



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BP5-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

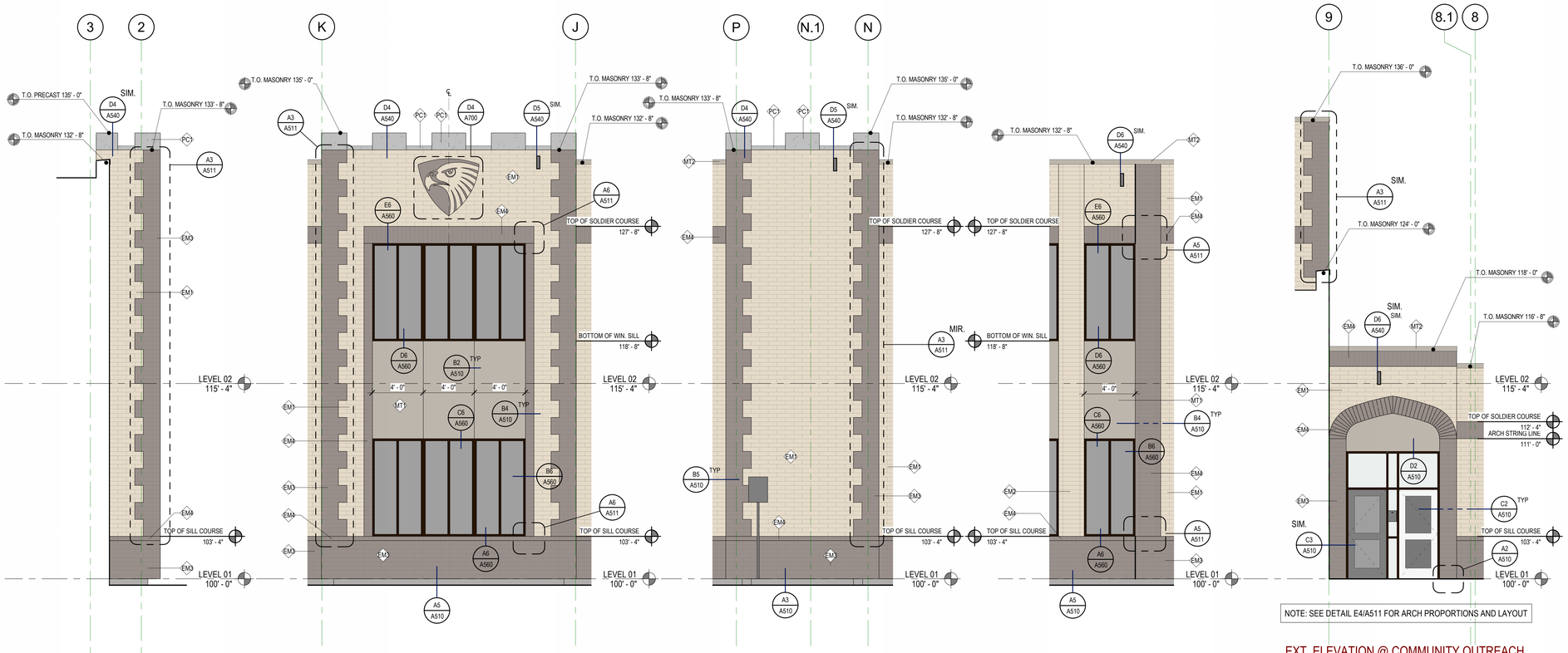
BID PACKAGE 5 - GENERAL CONSTRUCTION

EXTERIOR ELEVATIONS

A205

11/17/2023 12:46:49 PM

KEYED NOTES



NOTE: SEE DETAIL E4/A511 FOR ARCH PROPORTIONS AND LAYOUT

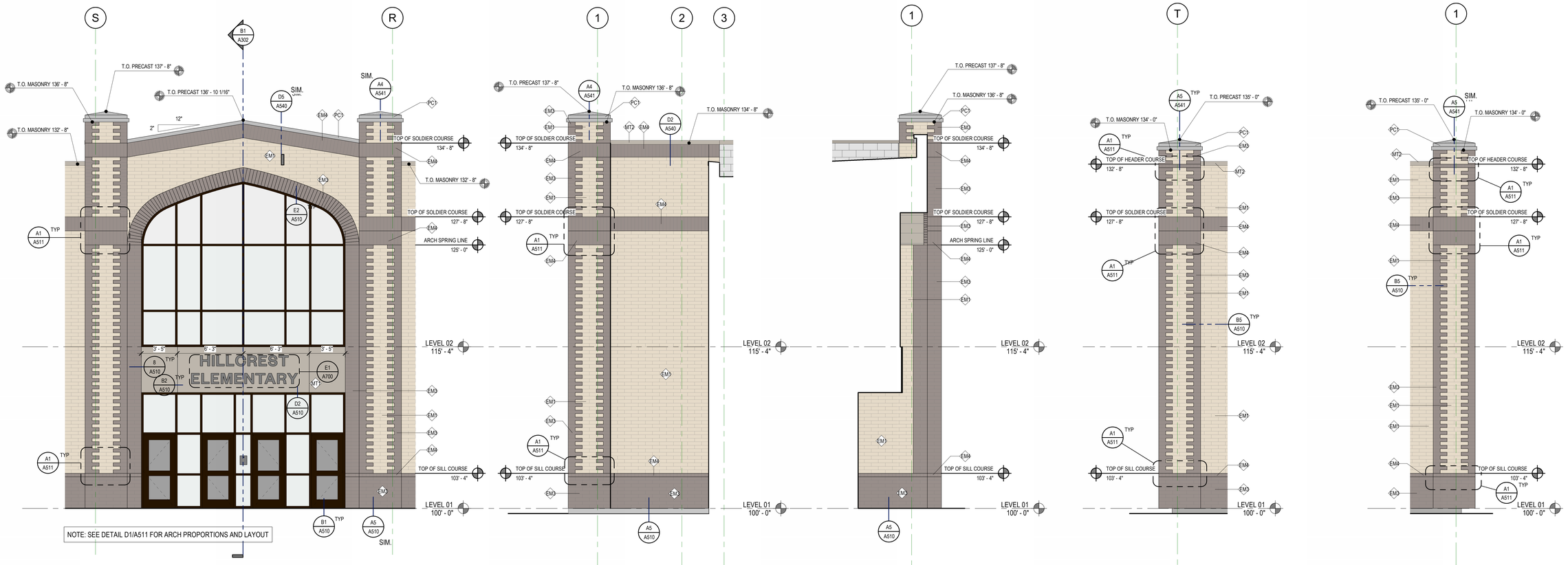
C1 EXT. ELEVATION @ TEACHER COLLAB. SIDE
SCALE: 1/4" = 1'-0"

C2 EXT. ELEVATION @ TEACHER COLLAB. FRONT
SCALE: 1/4" = 1'-0"

C3 TYP. MASONRY BUMPOUT WALL
SCALE: 1/4" = 1'-0"

C4 TYP. MASONRY PATTERN AT WINDOWS
SCALE: 1/4" = 1'-0"

C5 EXT. ELEVATION @ COMMUNITY OUTREACH ARCADE
SCALE: 1/4" = 1'-0"



NOTE: SEE DETAIL D1/A511 FOR ARCH PROPORTIONS AND LAYOUT

A1 EXT. ELEVATION @ MAIN ENTRY - FRONT
SCALE: 1/4" = 1'-0"

A3 EXT. ELEVATION @ MAIN ENTRY - SIDE
SCALE: 1/4" = 1'-0"

A4 EXT. ELEVATION @ MAIN ENTRY - INNER WALL
SCALE: 1/4" = 1'-0"

A5 TYP. CORNER TOWER - NORTH/SOUTH ELEV.
SCALE: 1/4" = 1'-0"

A6 TYP. CORNER TOWER - EAST/WEST ELEV.
SCALE: 1/4" = 1'-0"

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DATE: NOVEMBER 08 2023

STATE OF UTAH
RICHARD W. BROWN
7067909
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

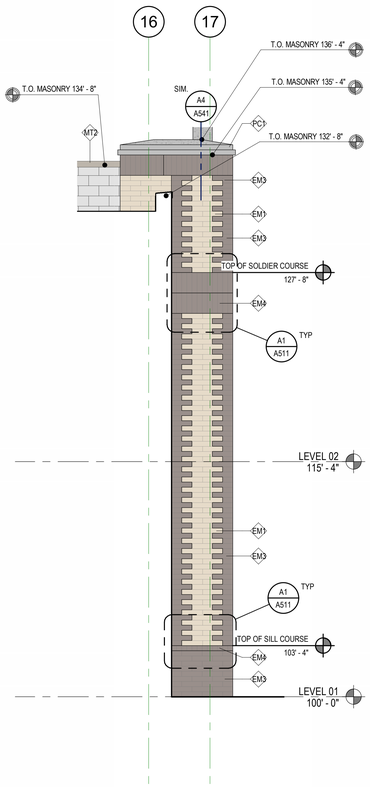
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED EXTERIOR ELEVATION

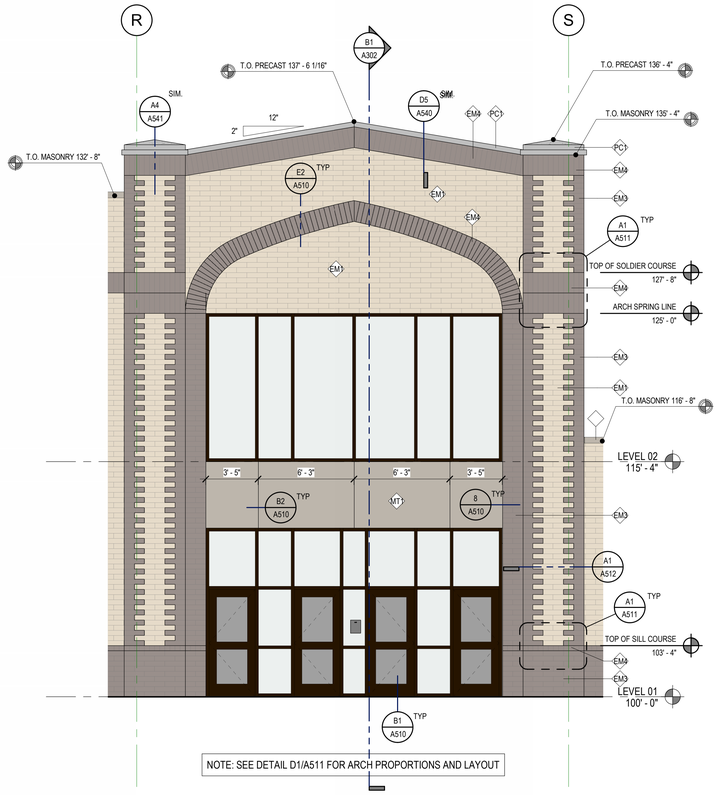
A206

11/8/2023 10:59:17 PM



C1 EXT. ELEVATION @ BACK ENTRY - SIDE

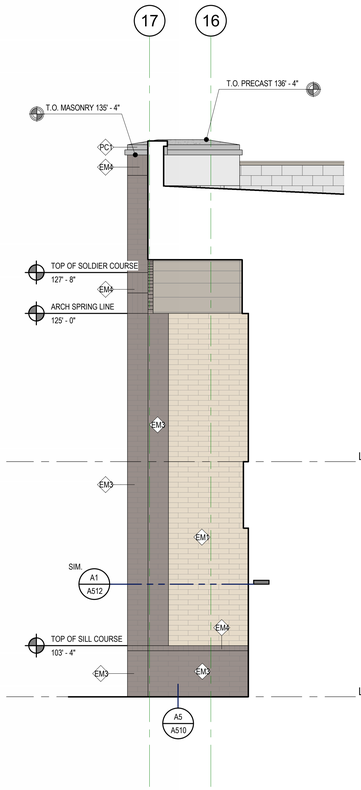
SCALE: 1/4" = 1'-0"



NOTE: SEE DETAIL D1/A511 FOR ARCH PROPORTIONS AND LAYOUT

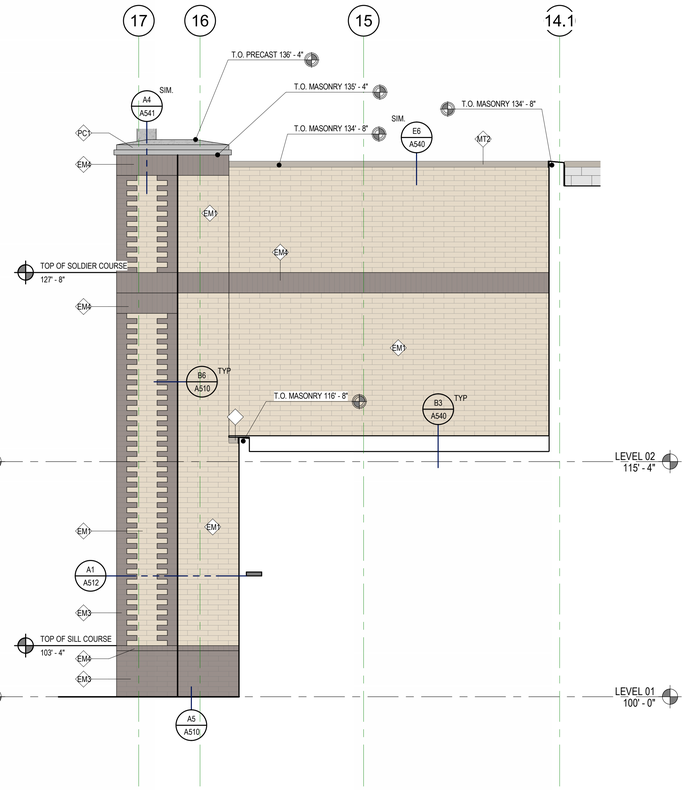
C2 EXT. ELEVATION @ BACK ENTRY - FRONT

SCALE: 1/4" = 1'-0"



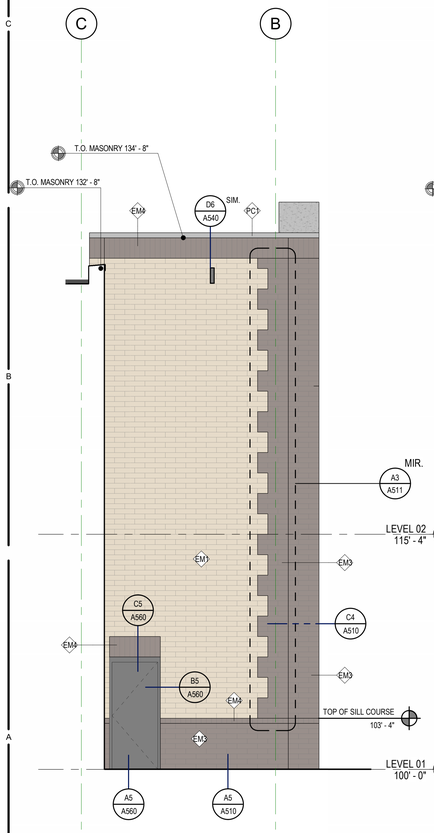
C4 EXT. ELEVATION @ BACK ENTRY - INNER WALL

SCALE: 1/4" = 1'-0"



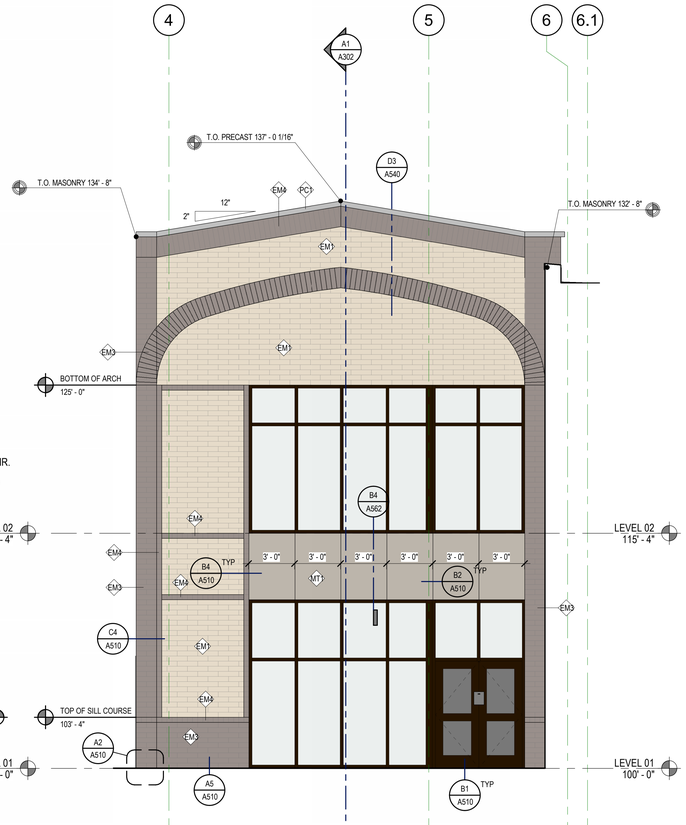
C5 EXT. ELEVATION @ BACK ENTRY - SIDE WALL TO MECH PENTHOUSE

SCALE: 1/4" = 1'-0"



A1 EXT. ELEVATION @ STAIR TOWER - SIDE

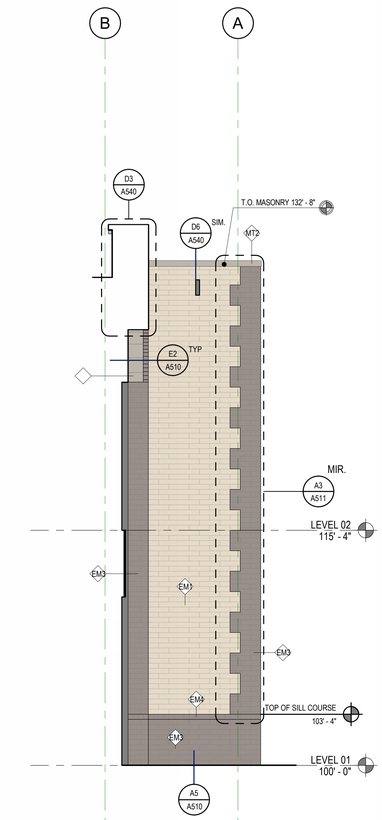
SCALE: 1/4" = 1'-0"



NOTE: SEE DETAIL D1/A511 FOR ARCH PROPORTIONS AND LAYOUT

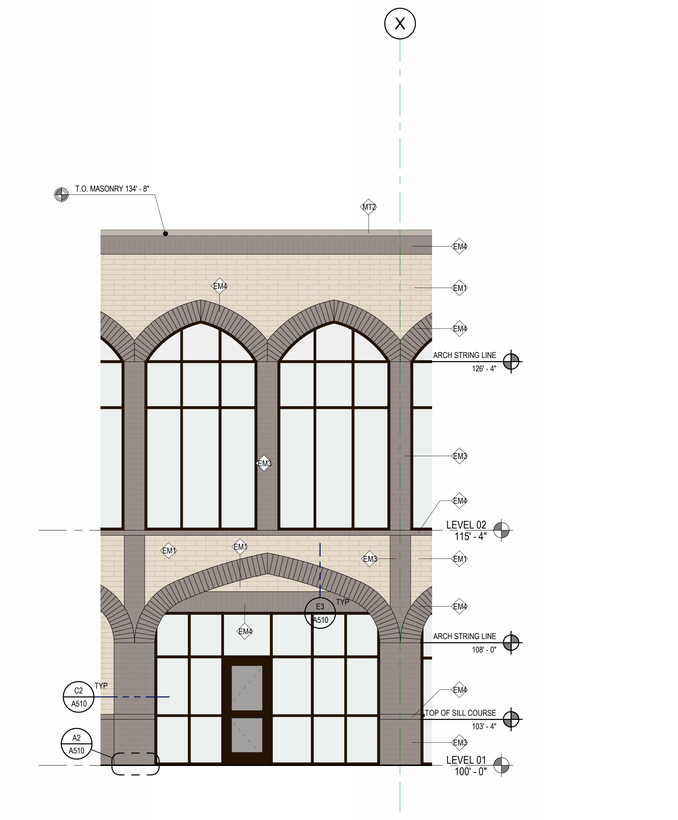
A2 EXT. ELEVATION @ STAIR TOWER - FRONT

SCALE: 1/4" = 1'-0"



A4 EXT. ELEVATION @ STAIR TOWER - PERP. WALL

SCALE: 1/4" = 1'-0"



NOTE: SEE DETAIL E4/A511 FOR ARCH PROPORTIONS AND LAYOUT

A5 EXT. ELEVATION @ TYP. FACADE IN FRONT OF STEAM & MEDIA CENTER

SCALE: 1/4" = 1'-0"

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STATE OF UTAH
REGISTERED
JARED C. WARD
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

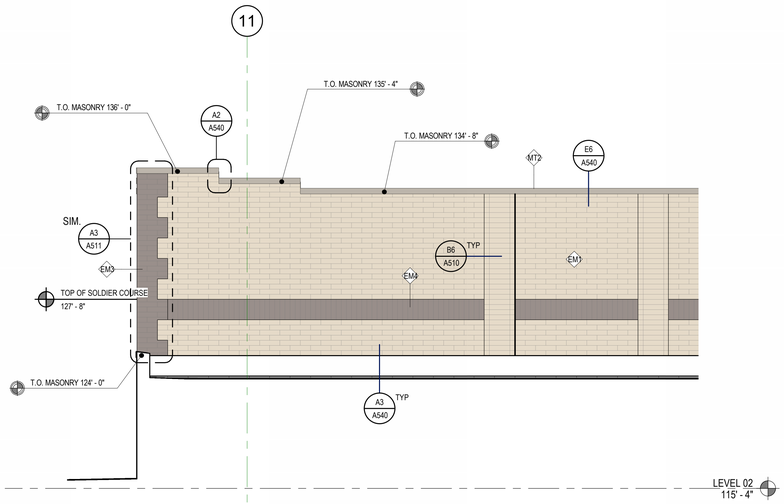
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED EXTERIOR ELEVATION

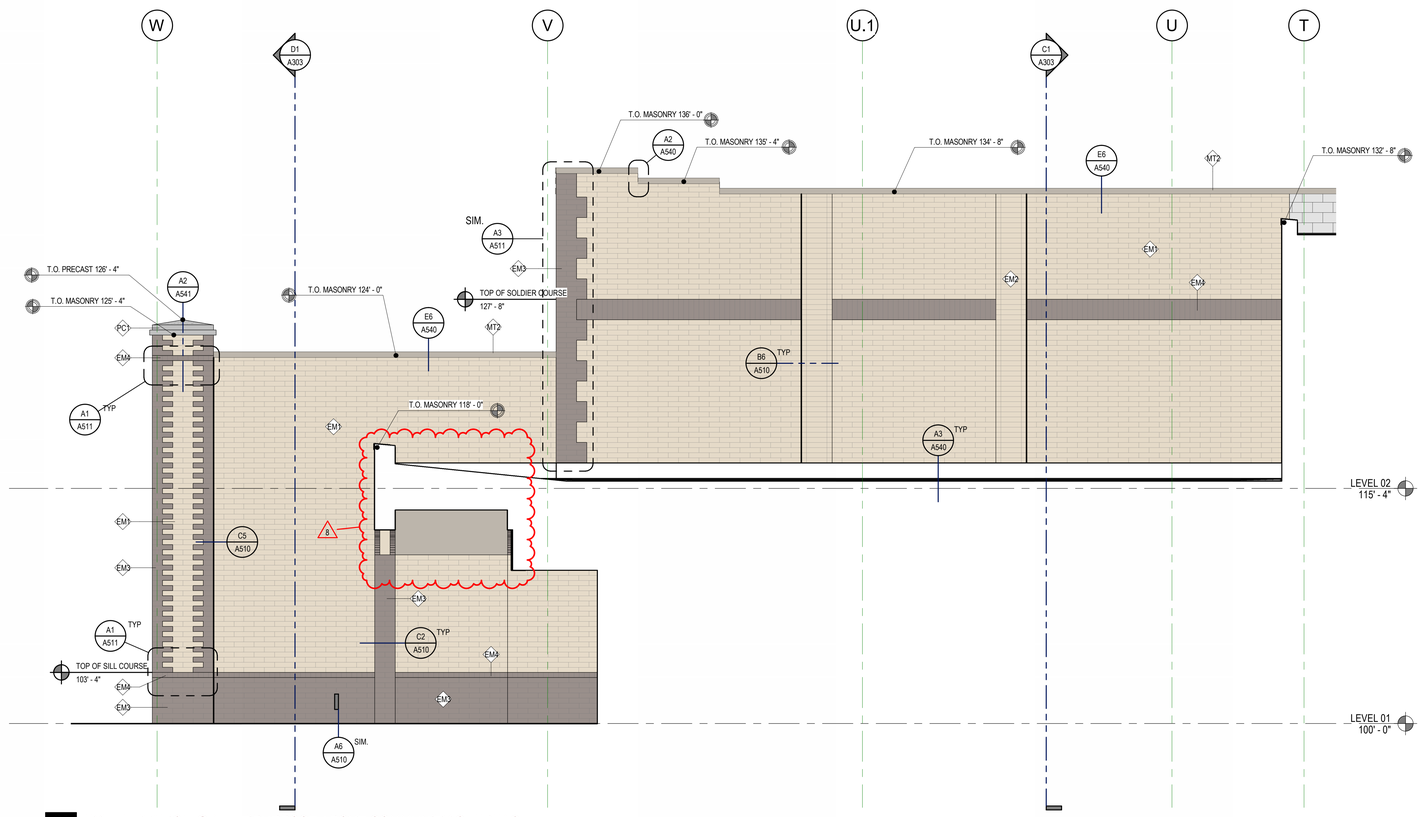
A207

11/8/2023 10:59:23 PM



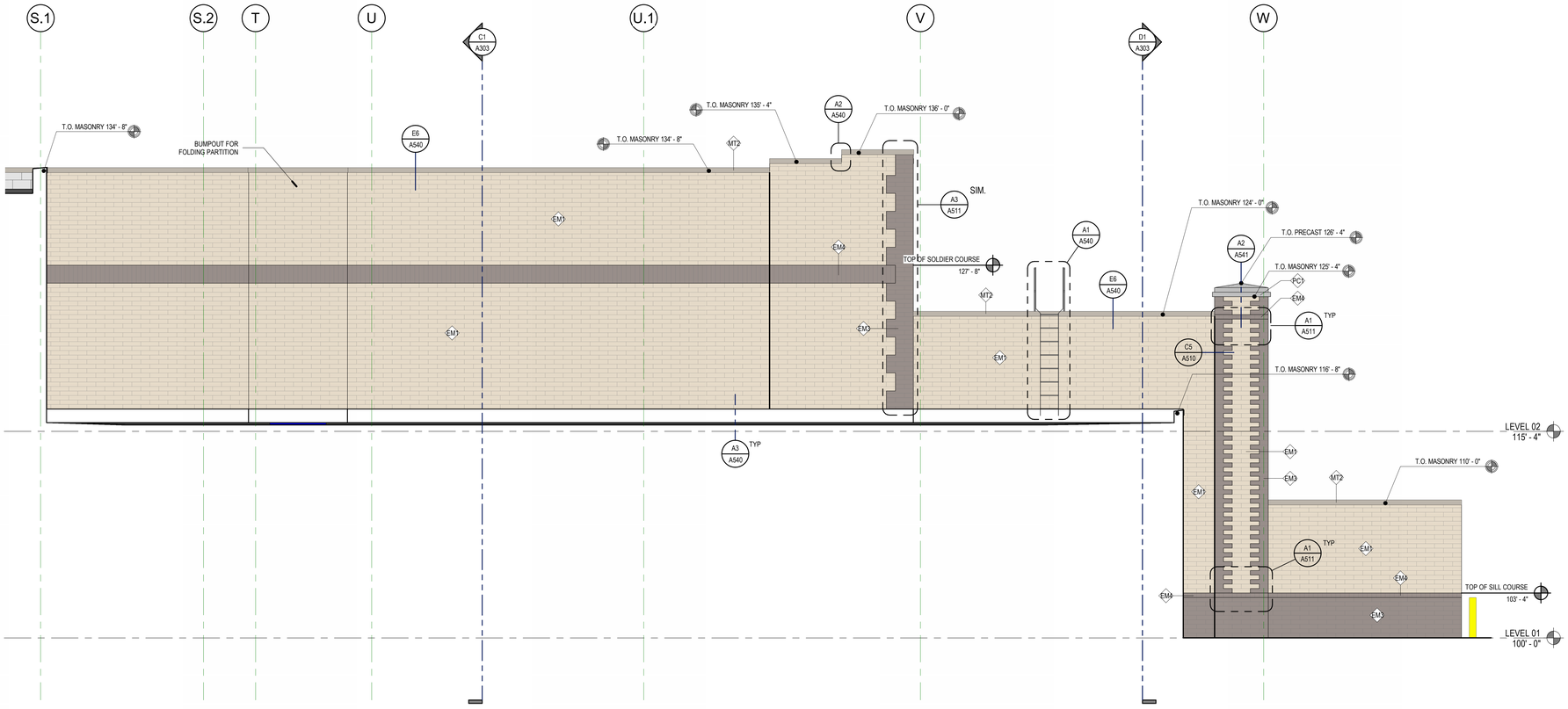
C1 EXT. ELEVATION @ PLATFORM - AREA 13

SCALE: 1/4" = 1'-0"



C3 EXT. ELEVATION @ MULTIPURPOSE ABOVE COMMUNITY OUTREACH

SCALE: 1/4" = 1'-0"



A1 EXT. ELEVATION @ MULTIPURPOSE - AREA 13

SCALE: 1/4" = 1'-0"

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STATE OF UTAH
DAVID SHEARMAN
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

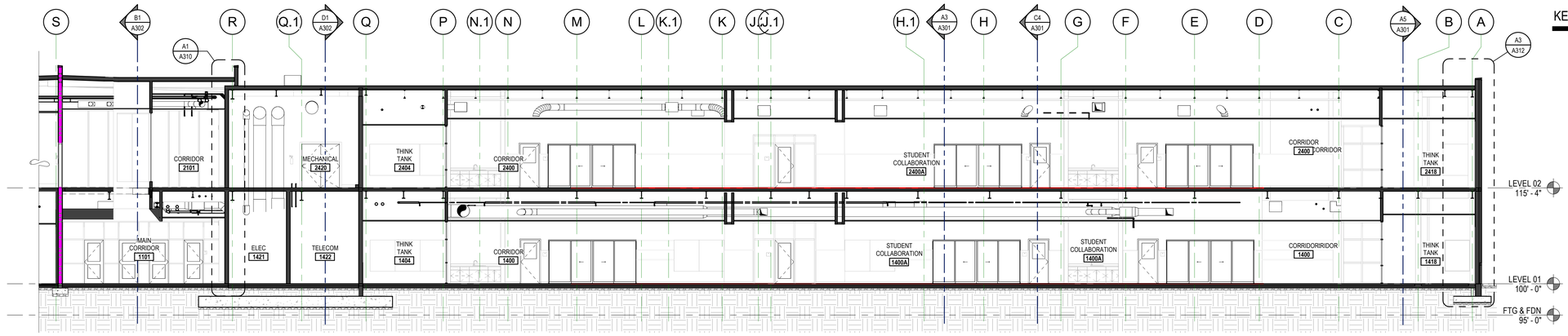
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED EXTERIOR ELEVATION

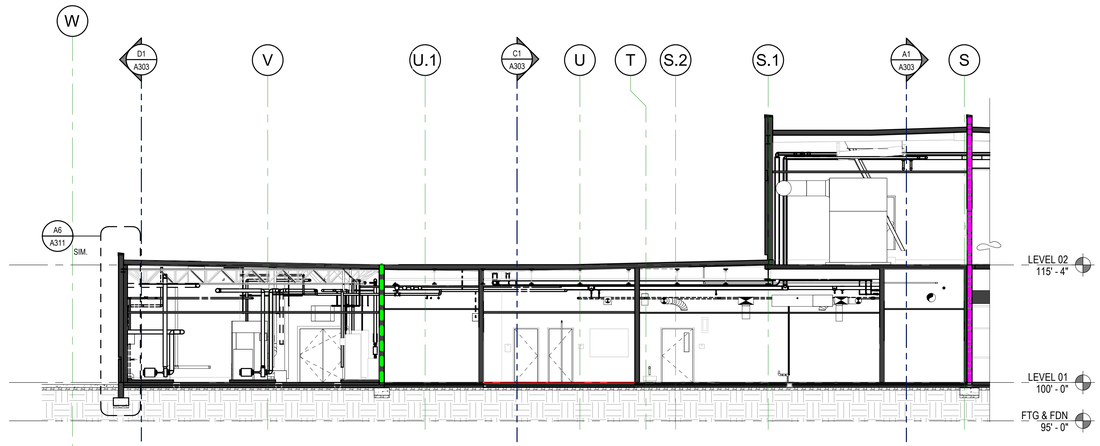
A208

12/4/2023 3:33:40 PM



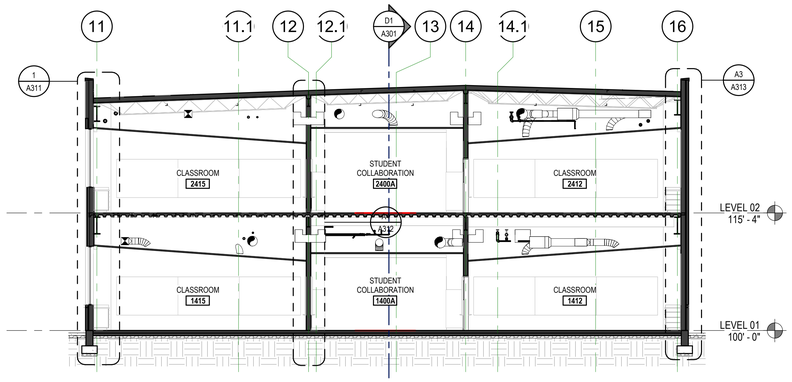
D1 BUILDING SECTION - X - CLASSROOMS

SCALE: 1/8" = 1'-0"



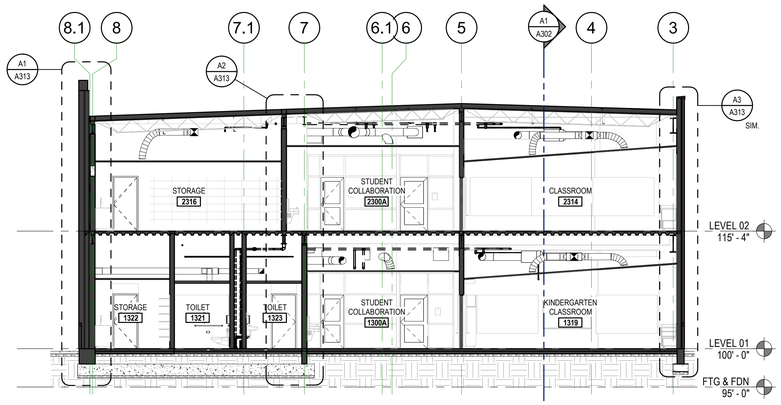
C1 Section 84

SCALE: 1/8" = 1'-0"



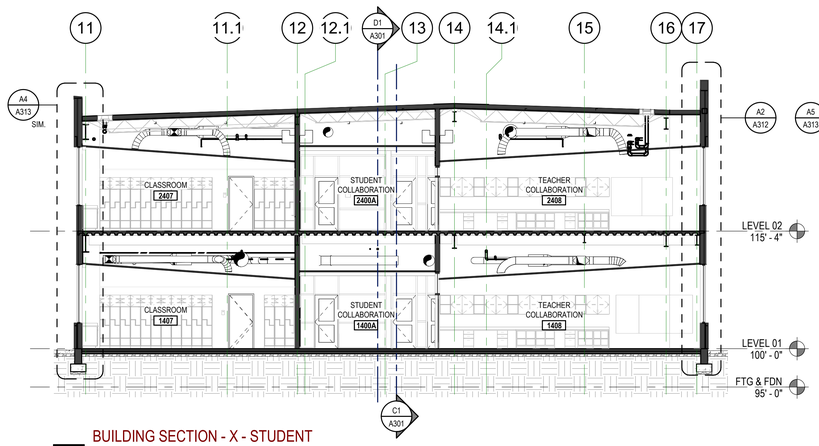
C4 BUILDING SECTION - GL - G

SCALE: 1/8" = 1'-0"



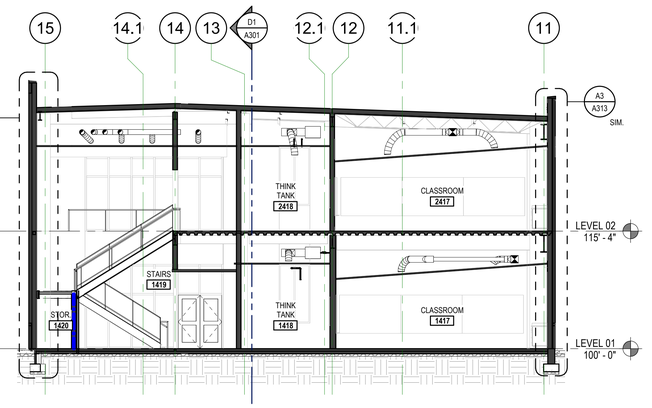
A1 BUILDING SECTION - GL - F

SCALE: 1/8" = 1'-0"



A3 BUILDING SECTION - X - STUDENT COLLABORATION

SCALE: 1/8" = 1'-0"



A5 BUILDING SECTION - GL - B

SCALE: 1/8" = 1'-0"

B1 A302

KEYED NOTES

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

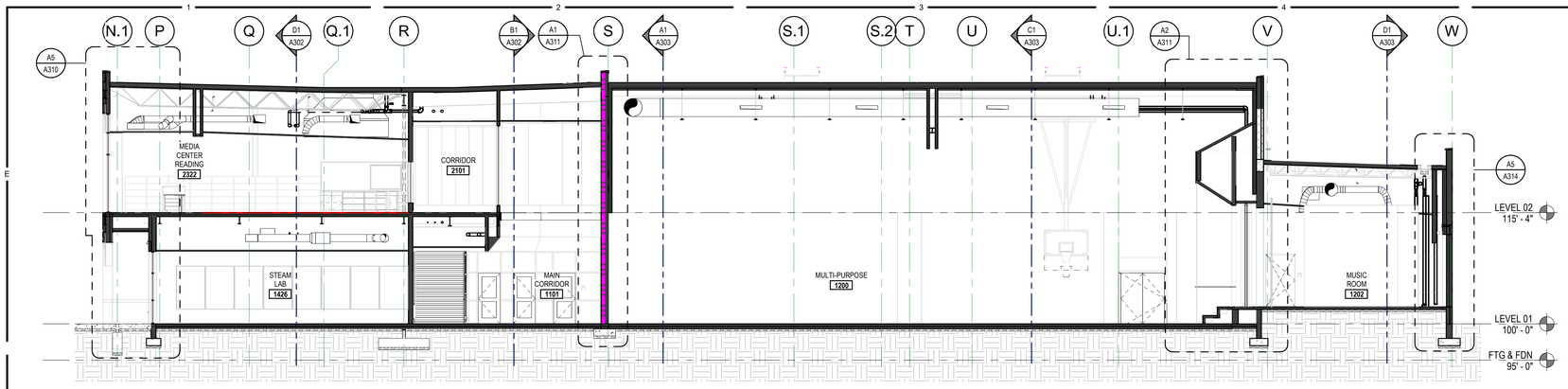
BID PACKAGE 5 - GENERAL CONSTRUCTION

BUILDING SECTIONS

A301

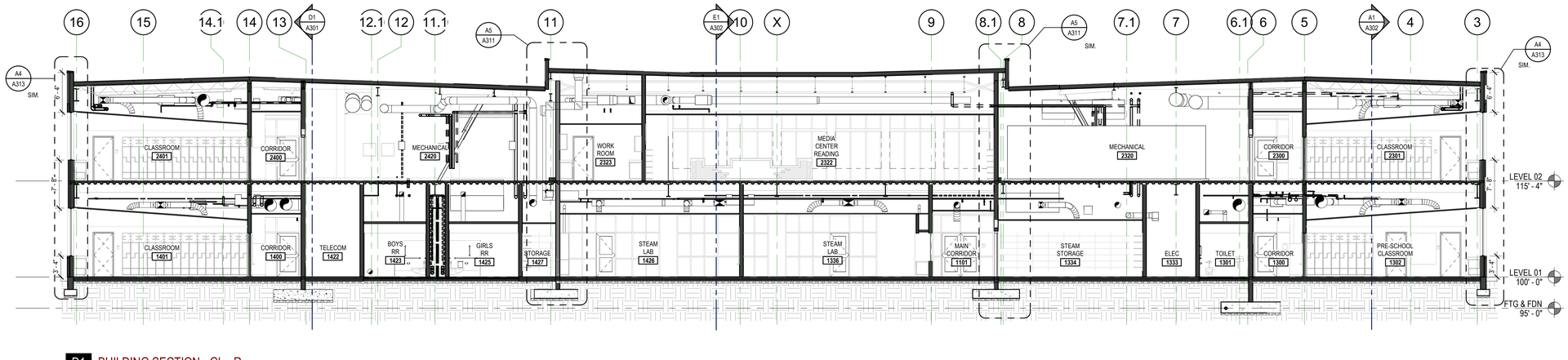
11/8/2023 10:44:15 PM

KEYED NOTES



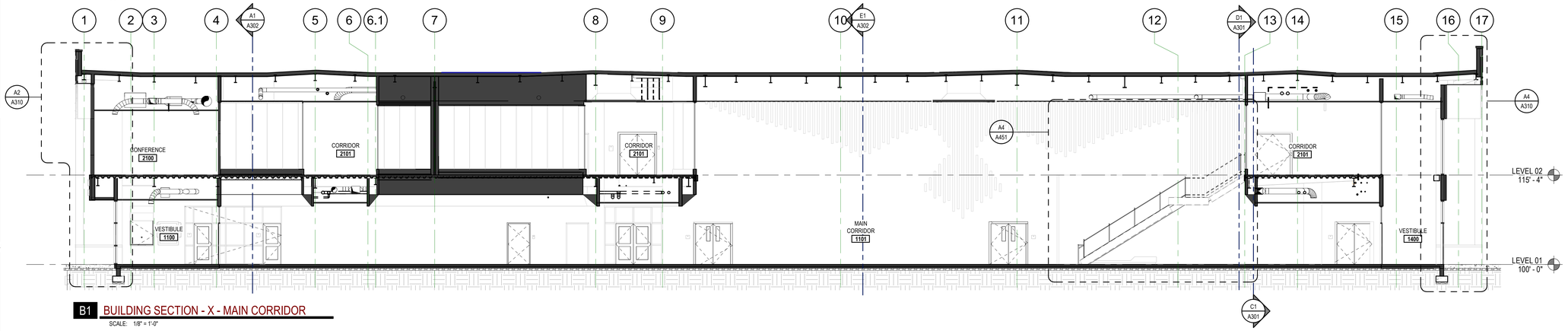
E1 BUILDING SECTION - X - MULTI-PURPOSE

SCALE: 1/8" = 1'-0"



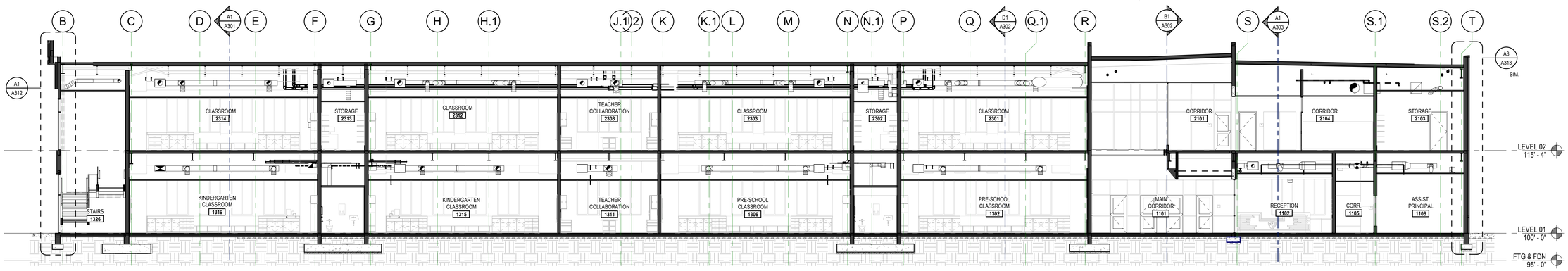
D1 BUILDING SECTION - GL - R

SCALE: 1/8" = 1'-0"



B1 BUILDING SECTION - X - MAIN CORRIDOR

SCALE: 1/8" = 1'-0"



A1 BUILDING SECTION - CLASSROOMS

SCALE: 1/8" = 1'-0"

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

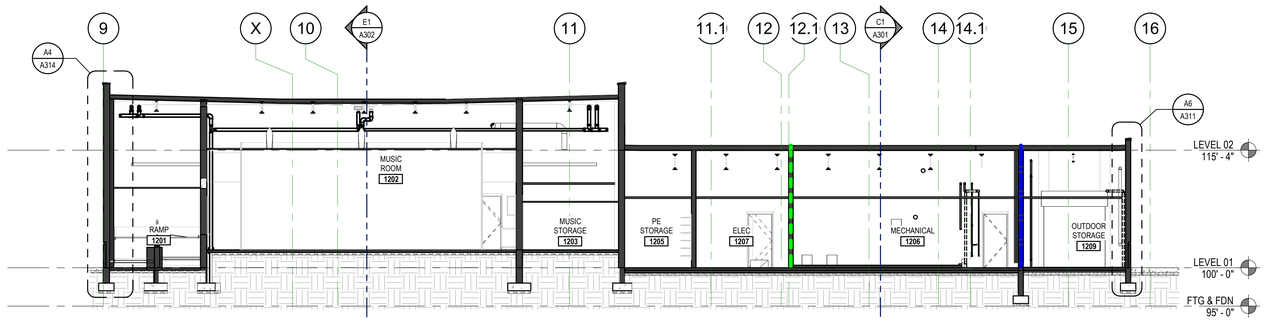
BID PACKAGE 5 - GENERAL CONSTRUCTION

BUILDING SECTIONS

A302

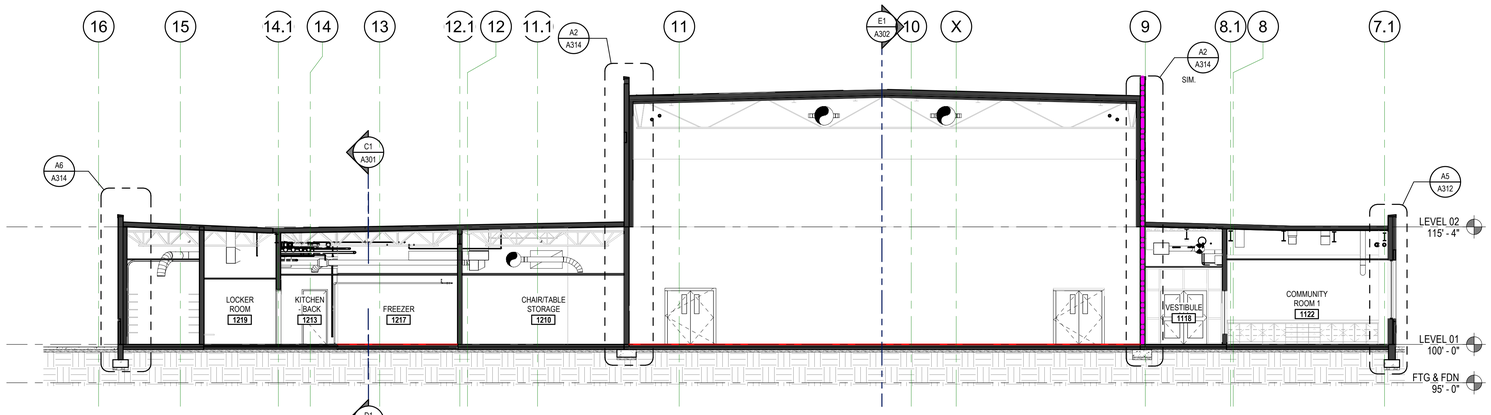
11/8/2023 10:44:34 PM

KEYED NOTES



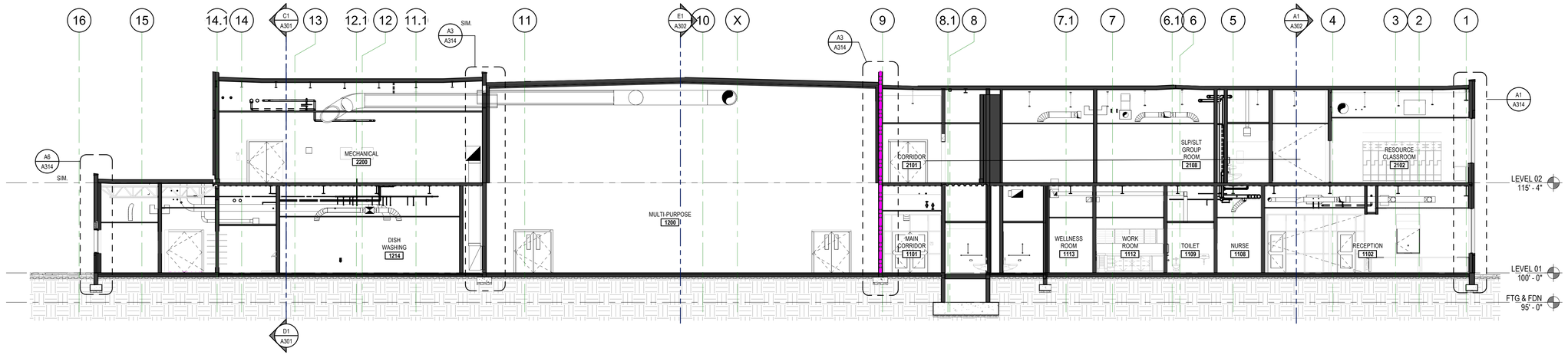
D1 BUILDING SECTION - GL - W

SCALE: 1/8" = 1'-0"



C1 BUILDING SECTION - GL - U

SCALE: 1/8" = 1'-0"



A1 BUILDING SECTION - GL - S

SCALE: 1/8" = 1'-0"

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

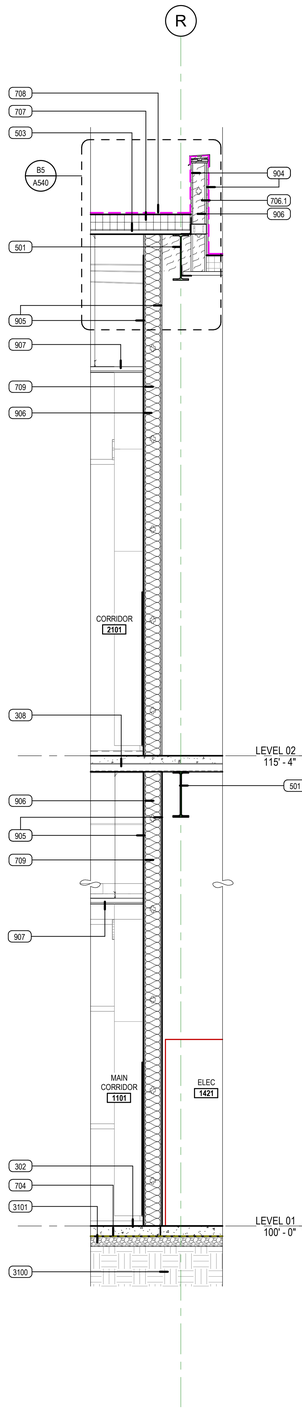
BUILDING SECTIONS

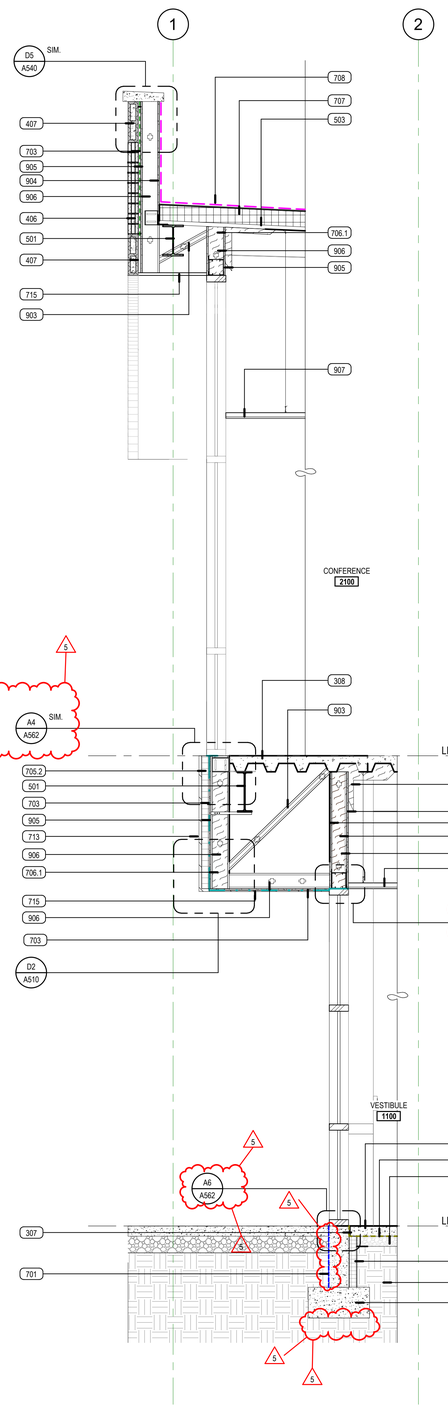
A303

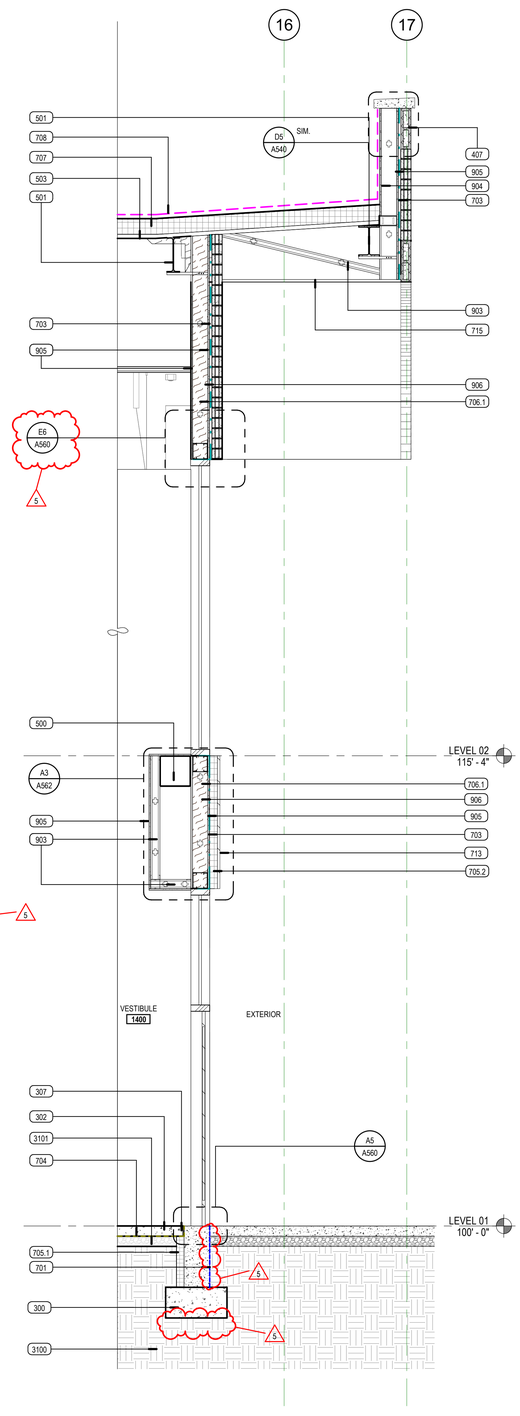
11/8/2023 10:44:49 PM

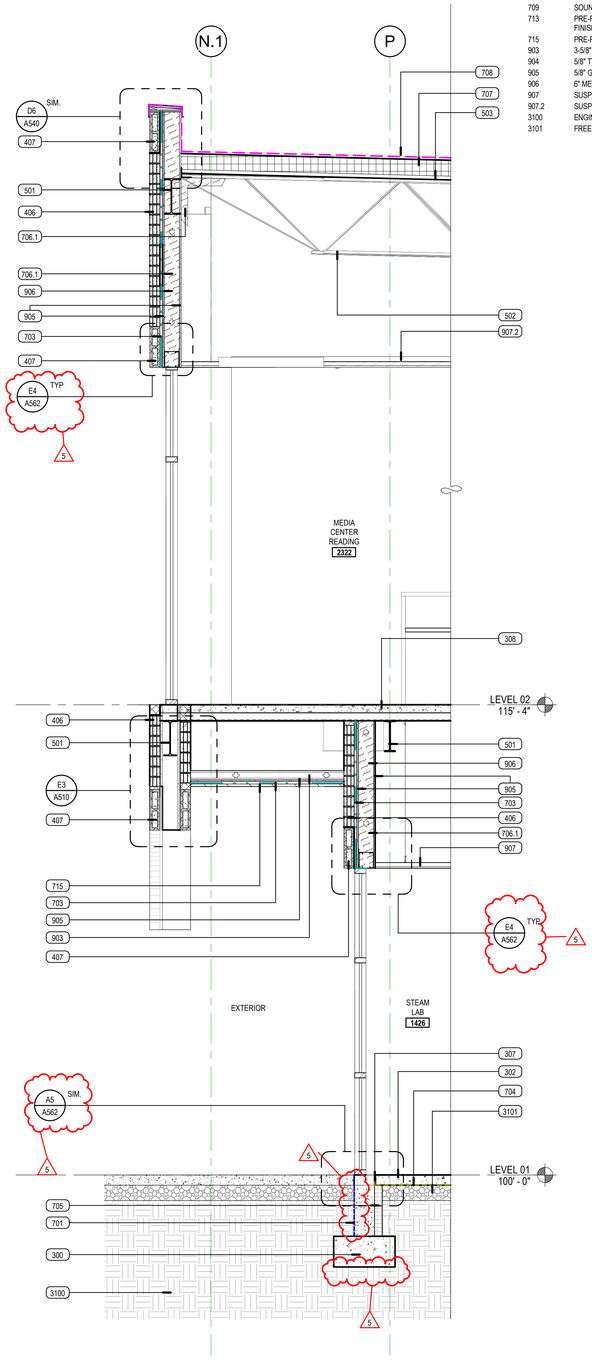
KEYED NOTES

300	REINFORCED CONCRETE FOOTING
302	REINFORCED CONCRETE SLAB
307	EXPANSION JOINT W/ 1/2" MINERAL FIBER/ASPHALTIC FILLER MATERIAL, CONTINUOUS
308	CONCRETE SLAB ON METAL DECK, PAINT DECK WHERE EXPOSED
406	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
407	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, SOLDIER COURSE
500	STEEL TUBE PAINTED WHERE EXPOSED
501	STEEL BEAM PAINTED WHERE EXPOSED
502	STEEL JOIST PAINTED WHERE EXPOSED
503	STEEL DECK PAINTED WHERE EXPOSED
701	DAMPROOFING UV RESISTANT PROTECTION BD. TYP.
705	AIR INGRESS BARRIER
704	UNDER SLAB VAPOR BARRIER
705	2" RIGID BD. INSUL. CONT. AT FOUNDATION WALL
705.1	3" RIGID BD. INSUL. CONT. AT FOUNDATION WALL
705.2	3" RIGID INSUL @ ACM
706.1	R6.8 PER INCH MINIMUM 2# SPRAY APPLIED CLOSED CELL THERMAL INSULATION WITH IGNITION BARRIER WHERE EXPOSED, TYP. WHERE WALL INTERSECTS FLOOR / ROOF DECK EXTEND INSULATION 18M MINIMUM OUT ONTO DECK SURFACE. FILL ALL ASSOCIATED VOIDS FOR A COMPLETE THERMALLY SEALED BARRIER, TYPE.
707	R-35 ROOF RIGID INSULATION BOARD SYSTEM
708	WHITE SINGLE PLY MEMBRANE ROOFING SYSTEM
709	SOUND BATT INSULATION FULL THICKNESS, TO DECK
713	PRE-FINISHED EXTERIOR ACM PANEL SYSTEM. SEE EXTERIOR ELEVATIONS FOR TYPES & FINISHES
715	PRE-FINISHED EXTERIOR METAL SOFFIT
903	3-5/8" METAL STUD FRAMING
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
905	5/8" GYP. SHEATHING
906	6" METAL STUD FRAMING
907	SUSPENDED ACOUSTICAL TILE CEILING
907.2	SUSPENDED WOOD PANEL. CEILING SYSTEM
3100	ENGINEERED FILL
3101	FREE DRAINING GRAVEL BASE









A1 WALL SECTION - 01.
SCALE: 1/2" = 1'-0"

A2 WALL SECTION - 02.
SCALE: 1/2" = 1'-0"

A4 WALL SECTION - 03.
SCALE: 1/2" = 1'-0"

A5 WALL SECTION - 04.
SCALE: 1/2" = 1'-0"

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STATE OF UTAH
CHRISTOPHER PAUL
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LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	00/00/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

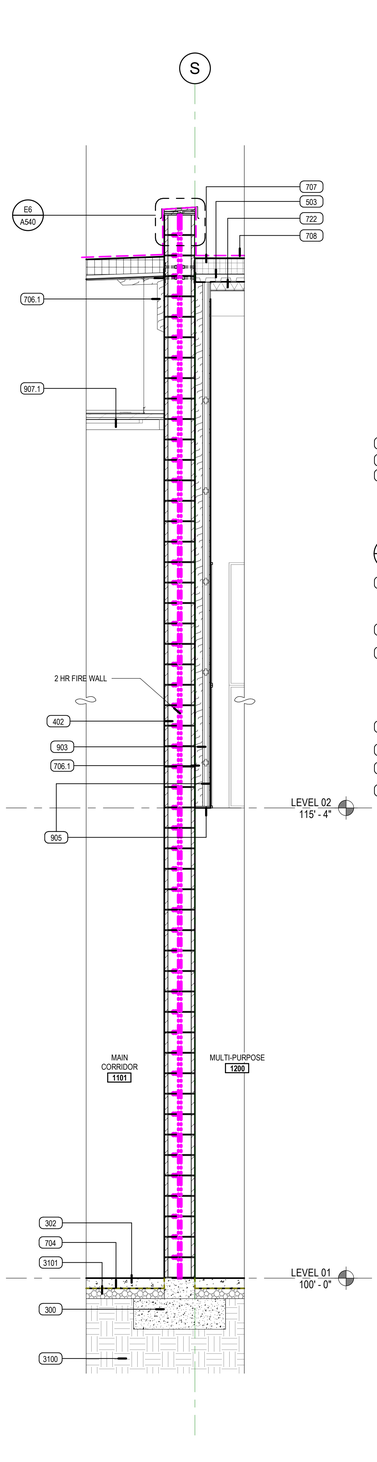
130 N. ECCLES AVE., OGDEN, UT 84404

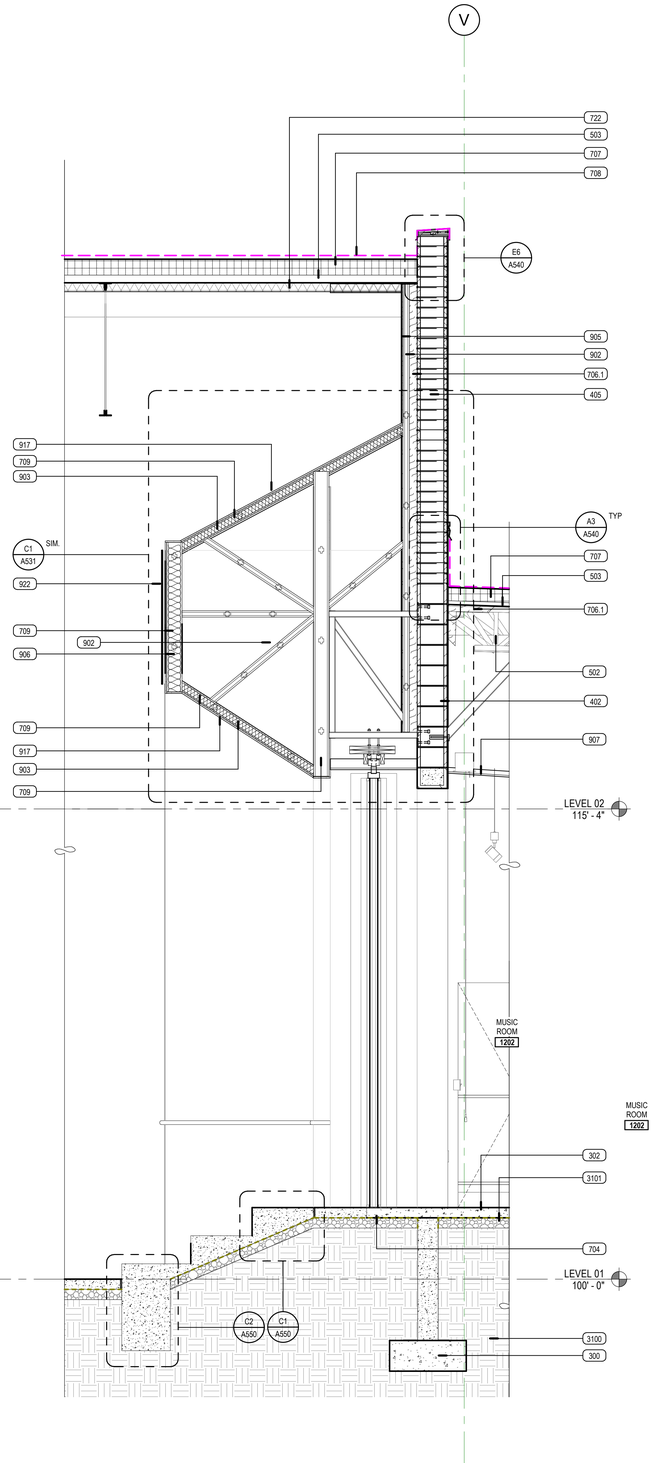
BID PACKAGE 5 - GENERAL CONSTRUCTION

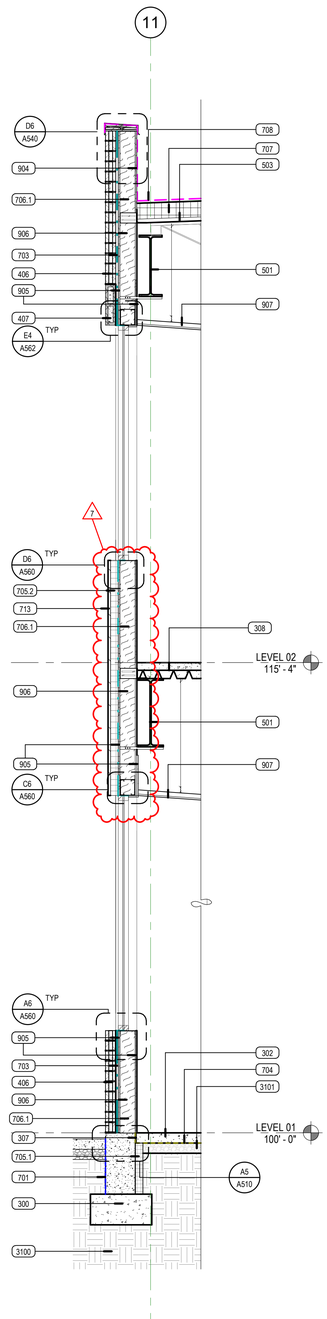
WALL SECTIONS

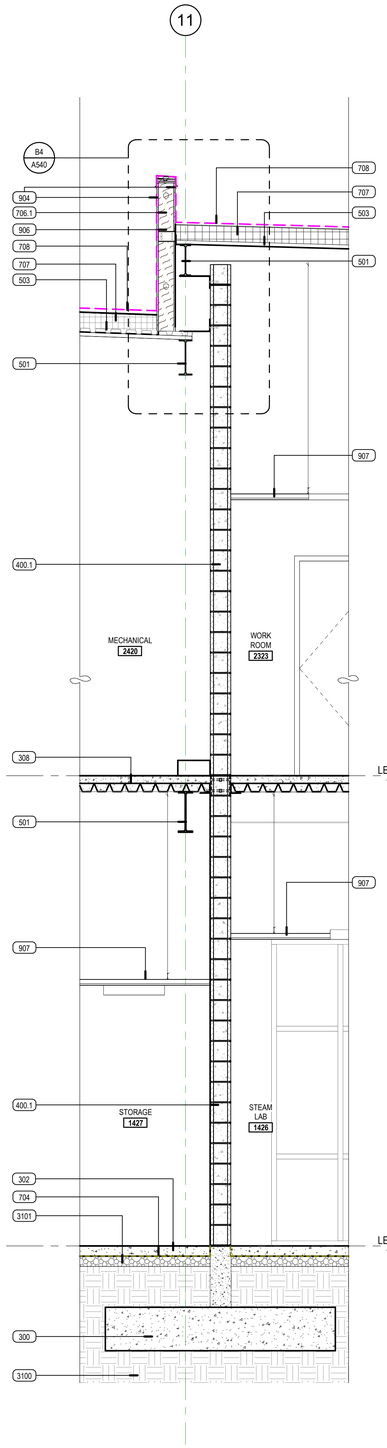
A310

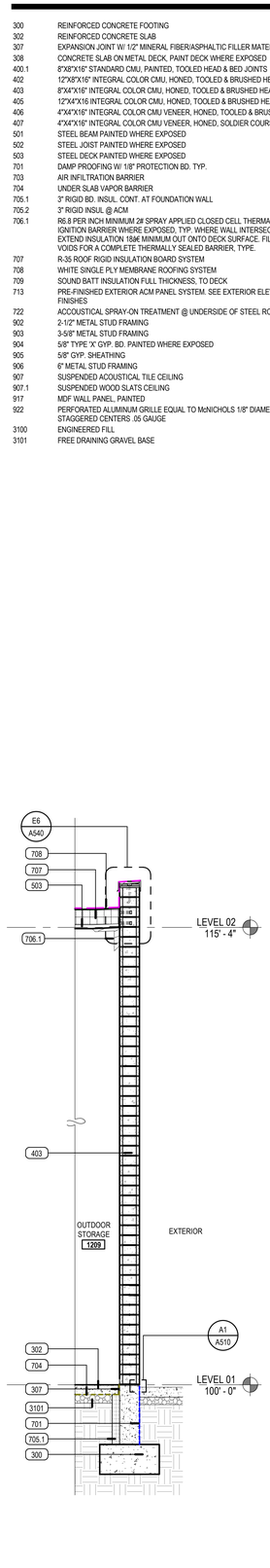
11/17/2023 12:43:16 PM











KEYED NOTES

300	REINFORCED CONCRETE FOOTING
302	REINFORCED CONCRETE SLAB
307	EXPANSION JOINT W/ 1/2" MINERAL FIBER/ASPHALTIC FILLER MATERIAL, CONTINUOUS
308	CONCRETE SLAB ON METAL DECK, PAINT DECK WHERE EXPOSED
400.1	8"X8"X16" STANDARD CMU, PAINTED, TOOLED HEAD & BED JOINTS
402	12"X8"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
403	8"X4"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
405	12"X4"X16 INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
406	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
407	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, SOLDIER COURSE
501	STEEL BEAM PAINTED WHERE EXPOSED
502	STEEL JOIST PAINTED WHERE EXPOSED
503	STEEL DECK PAINTED WHERE EXPOSED
701	DAMP PROOFING W/ 1/8" PROTECTION BD, TYP.
703	AIR INFILTRATION BARRIER
704	UNDER SLAB VAPOR BARRIER
705.1	3" RIGID BD. INSUL. CONT. AT FOUNDATION WALL
705.2	3" RIGID INSUL @ ACM
706.1	R6.8 PER INCH MINIMUM 2# SPRAY APPLIED CLOSED CELL THERMAL INSULATION WITH IGNITION BARRIER WHERE EXPOSED, TYP. WHERE WALL INTERSECTS FLOOR / ROOF DECK EXTEND INSULATION 18â€ MINIMUM OUT ONTO DECK SURFACE. FILL ALL ASSOCIATED VOIDS FOR A COMPLETE THERMALLY SEALED BARRIER, TYPE.
707	R-35 ROOF RIGID INSULATION BOARD SYSTEM
708	WHITE SINGLE PLY MEMBRANE ROOFING SYSTEM
709	SOUND BATT INSULATION FULL THICKNESS, TO DECK
713	PRE-FINISHED EXTERIOR ACM PANEL SYSTEM. SEE EXTERIOR ELEVATIONS FOR TYPES & FINISHES
722	ACCOUSTICAL SPRAY-ON TREATMENT @ UNDERSIDE OF STEEL ROOF DECK
902	2-1/2" METAL STUD FRAMING
903	3-5/8" METAL STUD FRAMING
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
905	5/8" GYP. SHEATHING
906	6" METAL STUD FRAMING
907	SUSPENDED ACOUSTICAL TILE CEILING
907.1	SUSPENDED WOOD SLATS CEILING
917	MDF WALL PANEL, PAINTED
922	PERFORATED ALUMINUM GRILLE EQUAL TO McNICHOLS 1/8" DIAMETER HOLES WITH 3/16" STAGGERED CENTERS .05 GAUGE
3100	ENGINEERED FILL
3101	FREE DRAINING GRAVEL BASE

A1 WALL SECTION - 05.
SCALE: 1/2" = 1'-0"

A2 WALL SECTION - 06.
SCALE: 1/2" = 1'-0"

A4 WALL SECTION - 07.
SCALE: 1/2" = 1'-0"

A5 WALL SECTION - 08.
SCALE: 1/2" = 1'-0"

A6 WALL SECTION - 09.
SCALE: 1/2" = 1'-0"

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JOSEPH SHEFFIELD PETERSEN
7067868
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03
8	00/00/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

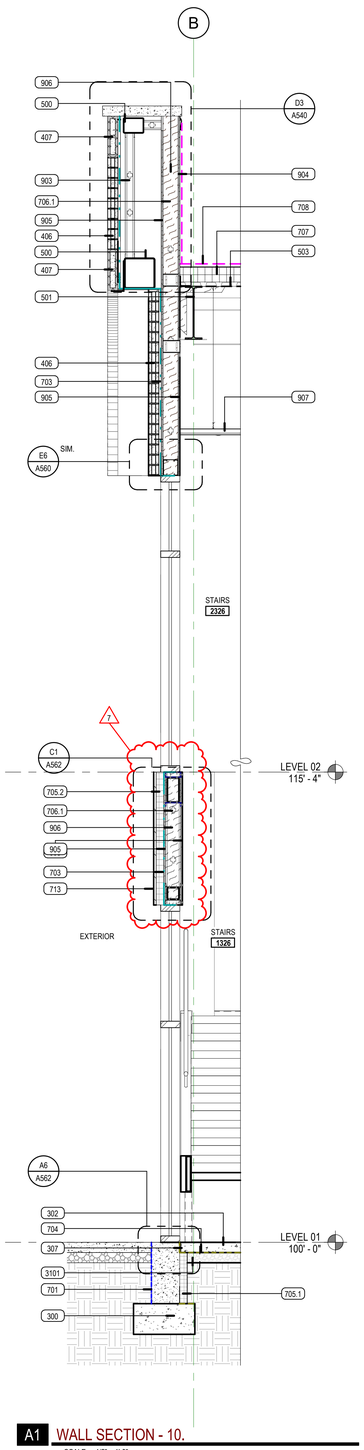
WALL SECTIONS

A311

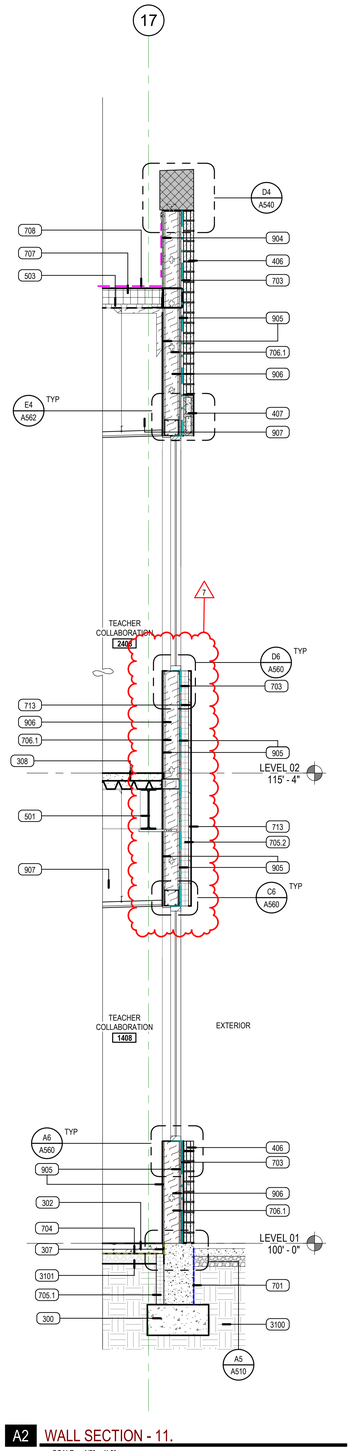
11/27/2023 12:44:47 PM

KEYED NOTES

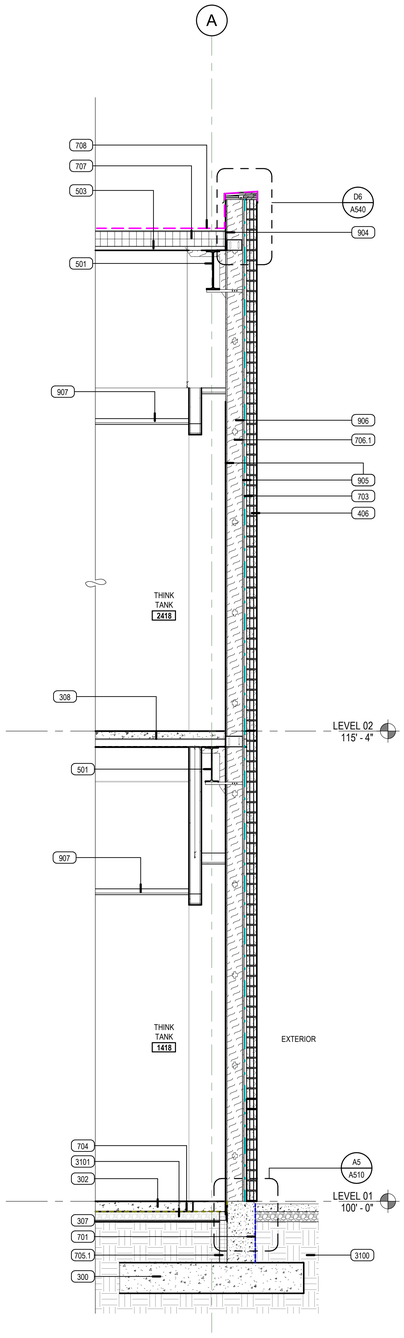
300	REINFORCED CONCRETE FOOTING
302	REINFORCED CONCRETE SLAB
307	EXPANSION JOINT W/ 1/2" MINERAL FIBER/ASPHALTIC FILLER MATERIAL, CONTINUOUS
308	CONCRETE SLAB ON METAL DECK, PAINT DECK WHERE EXPOSED
406	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
407	4"X4"X16" INTEGRAL COLOR CMU VENEER, HONED, SOLDIER COURSE
500	STEEL TUBE PAINTED WHERE EXPOSED
501	STEEL BEAM PAINTED WHERE EXPOSED
503	STEEL DECK PAINTED WHERE EXPOSED
701	DAMP PROOFING W/ 1/8" PROTECTION BD. TYP.
703	AIR INFILTRATION BARRIER
704	UNDER SLAB VAPOR BARRIER
705.1	3" RIGID BD. INSUL. CONT. AT FOUNDATION WALL
705.2	3" RIGID INSUL @ ACM
706.1	R6.8 PER INCH MINIMUM 2# SPRAY APPLIED CLOSED CELL THERMAL INSULATION WITH IGNITION BARRIER WHERE EXPOSED, TYP. WHERE WALL INTERSECTS FLOOR / ROOF DECK EXTEND INSULATION 18â€ MINIMUM OUT ONTO DECK SURFACE. FILL ALL ASSOCIATED VOIDS FOR A COMPLETE THERMALLY SEALED BARRIER, TYPE.
707	R-35 ROOF RIGID INSULATION BOARD SYSTEM
708	WHITE SINGLE PLY MEMBRANE ROOFING SYSTEM
709	SOUND BATT INSULATION FULL THICKNESS, TO DECK
713	PRE-FINISHED EXTERIOR ACM PANEL SYSTEM. SEE EXTERIOR ELEVATIONS FOR TYPES & FINISHES
903	3-5/8" METAL STUD FRAMING
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
905	5/8" GYP. SHEATHING
906	6" METAL STUD FRAMING
907	SUSPENDED ACOUSTICAL TILE CEILING
3100	ENGINEERED FILL
3101	FREE DRAINING GRAVEL BASE



A1 WALL SECTION - 10.
SCALE: 1/2" = 1'-0"



A2 WALL SECTION - 11.
SCALE: 1/2" = 1'-0"



A3 WALL SECTION - 12.
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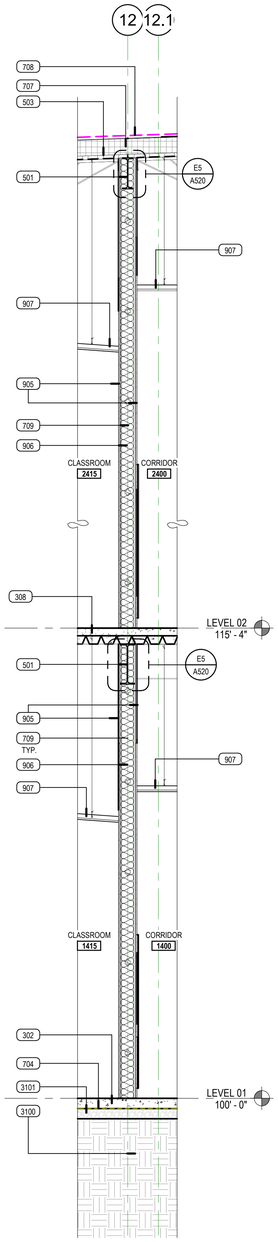
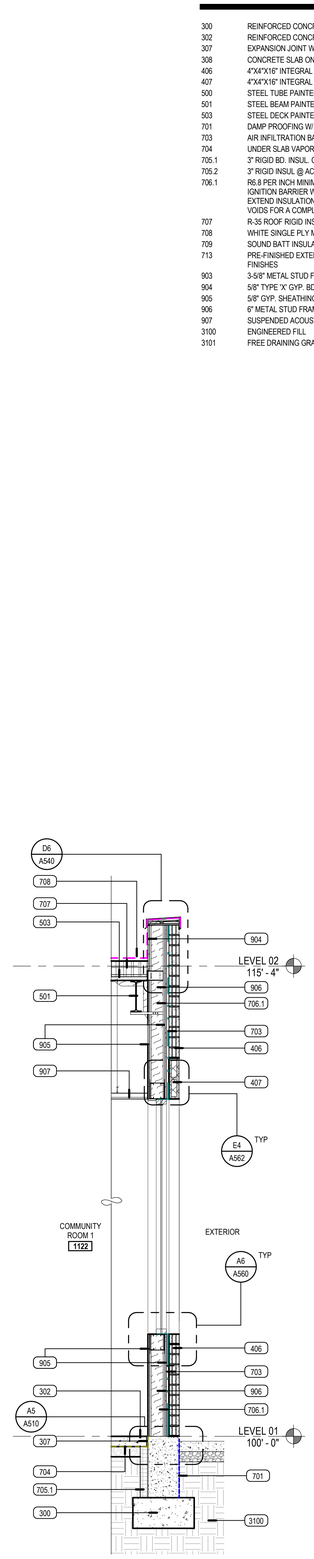


A4 WALL SECTION - 13.
SCALE: 1/2" = 1'-0"



A5 WALL SECTION - 14.
SCALE: 1/2" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH
DAVID SHEFFIELD
7067968
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03
8	00/00/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

WALL SECTIONS

A312

11/27/2023 12:44:54 PM

KEYED NOTES

300	REINFORCED CONCRETE FOOTING
302	REINFORCED CONCRETE SLAB
307	EXPANSION JOINT W/ 1/2" MINERAL FIBER/ASPHALTIC FILLER MATERIAL, CONTINUOUS
308	CONCRETE SLAB ON METAL DECK, PAINT DECK WHERE EXPOSED
400	8"X8"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
400.1	8"X8"X16" STANDARD CMU, PAINTED, TOOLED HEAD & BED JOINTS
401.2	
403	8"X4"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
404	10"X4"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
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703	AIR INFILTRATION BARRIER
704	UNDER SLAB VAPOR BARRIER
705	2" RIGID BD. INSUL. CONT. AT FOUNDATION WALL
705.1	3" RIGID BD. INSUL. CONT. AT FOUNDATION WALL
705.2	3" RIGID INSUL @ ACM
706.1	R6.8 PER INCH MINIMUM 2# SPRAY APPLIED CLOSED CELL THERMAL INSULATION WITH IGNITION BARRIER WHERE EXPOSED, TYP. WHERE WALL INTERSECTS FLOOR / ROOF DECK EXTEND INSULATION 18â€ MINIMUM OUT ONTO DECK SURFACE. FILL ALL ASSOCIATED VOIDS FOR A COMPLETE THERMALLY SEALED BARRIER, TYPE.
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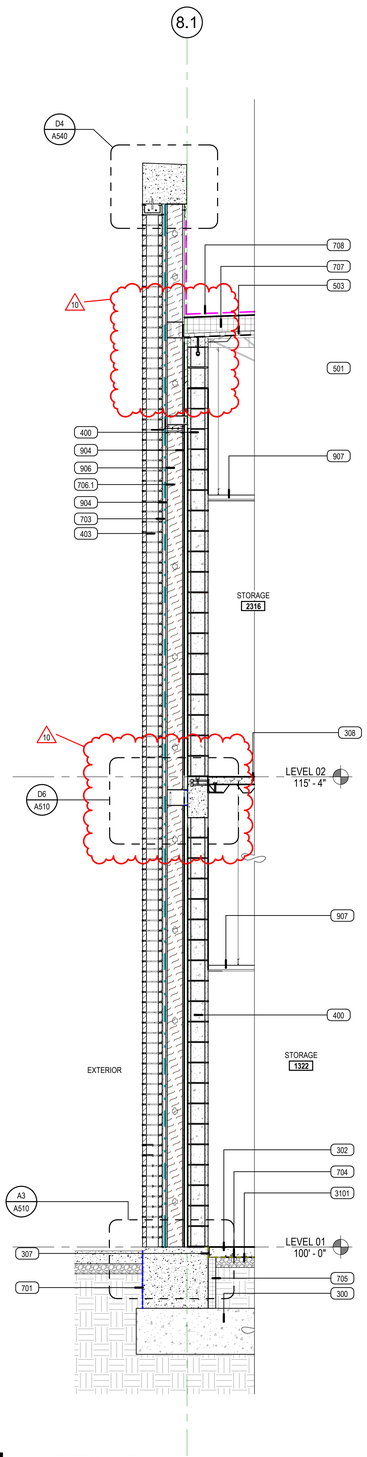
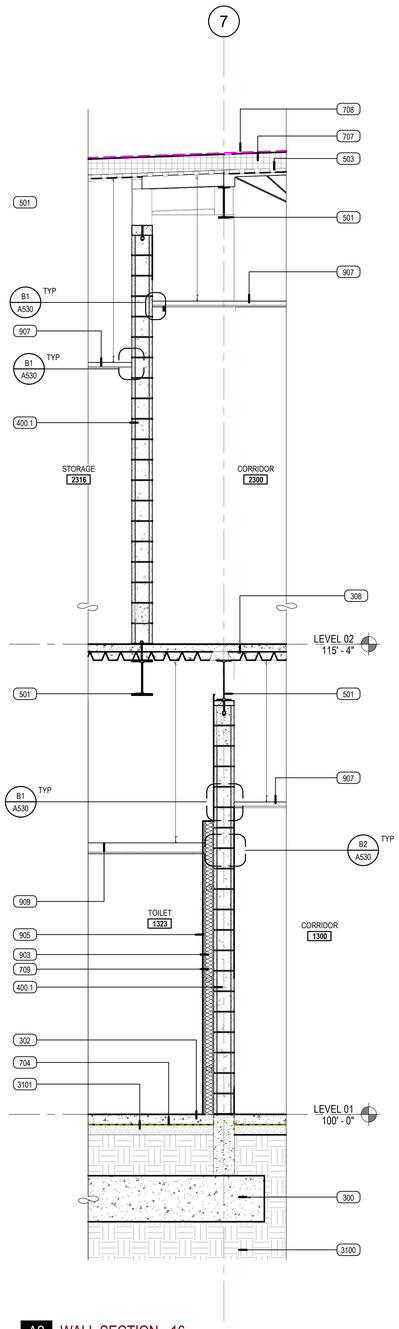
909	SUSPENDED GYP. BD. CEILING SYSTEM
3100	ENGINEERED FILL
3101	FREE DRAINING GRAVEL BASE



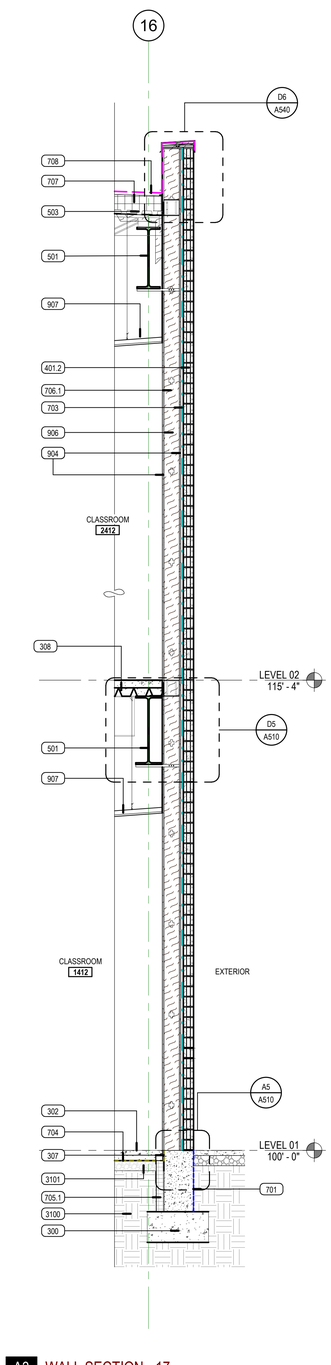
A1 WALL SECTION - 15.

SCALE: 1/2" = 1'-0"



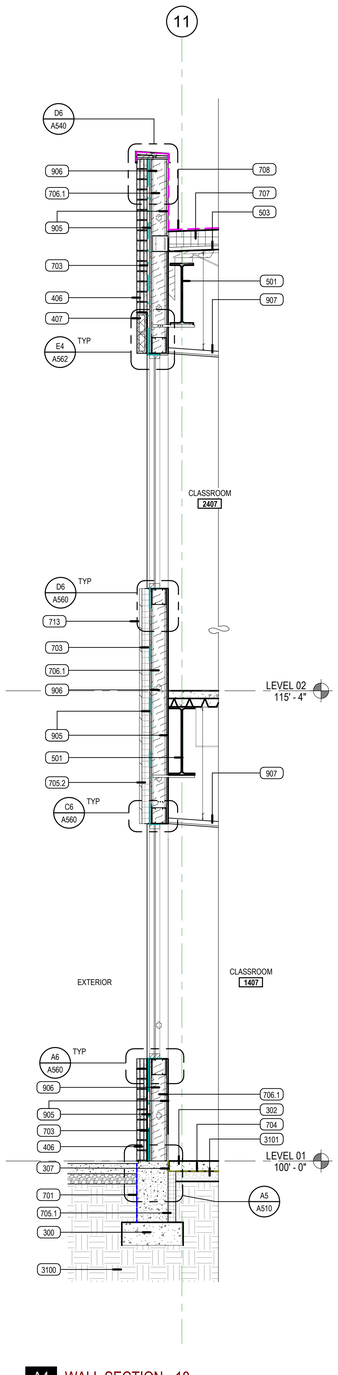
A2 WALL SECTION - 16.

SCALE: 1/2" = 1'-0"



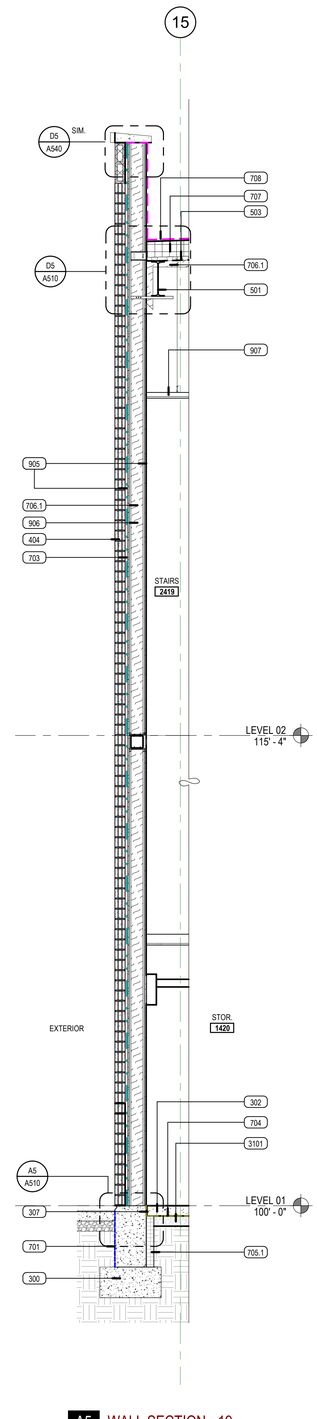
A3 WALL SECTION - 17.

SCALE: 1/2" = 1'-0"



A4 WALL SECTION - 18.

SCALE: 1/2" = 1'-0"



A5 WALL SECTION - 19.

SCALE: 1/2" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: DECEMBER 12 2023

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03
8	12/04/2023	ASI-03
10	12/26/2023	PR-01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

WALL SECTIONS

A313

12/26/2023 3:47:10 PM

KEYED NOTES

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705	2" RIGID BD. INSUL. CONT. AT FOUNDATION WALL
705.1	3" RIGID BD. INSUL. CONT. AT FOUNDATION WALL
705.2	3" RIGID INSUL @ ACM
706	3" MINIMUM DEPTH, R6.8 PER INCH MINIMUM LTTR RATING, 2# SPRAY APPLIED CLOSED CELL THERMAL INSULATION W/ IGNITION BARRIER WHERE EXPOSED TO POTENTIAL IGNITION, TYP. PROVIDE MINIMUM 3" UNINTERRUPTED LAYER BETWEEN METAL STUD FRAMING & MASONRY WALL AT MASONRY WALLS & FULL DEPTH STUD THICKNESS AT METAL STUD FRAMED WALL, FULL HEIGHT, TYP. INSULATE ALL BACK TO BACK STUDS, BOX HEADERS, & OTHER FRAMING THAT CREATES CONCEALED SPACES IN OTHERWISE INSULATED WALLS, TYP. WHERE WALL INTERSECTS FLOOR/ROOF DECK, EXTEND INSULATION 18" MINIMUM ONTO DECK SURFACE. FILL ALL ASSOCIATED VOIDS FOR A COMPLETE THERMALLY SEALED BARRIER.
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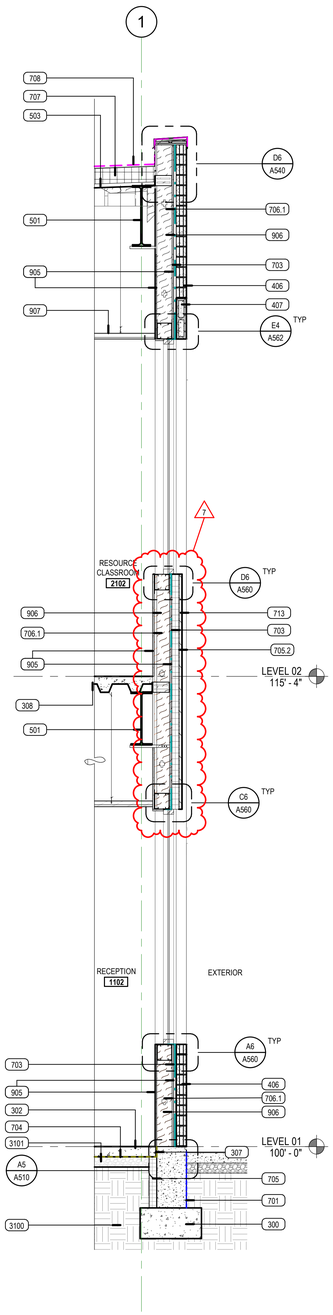
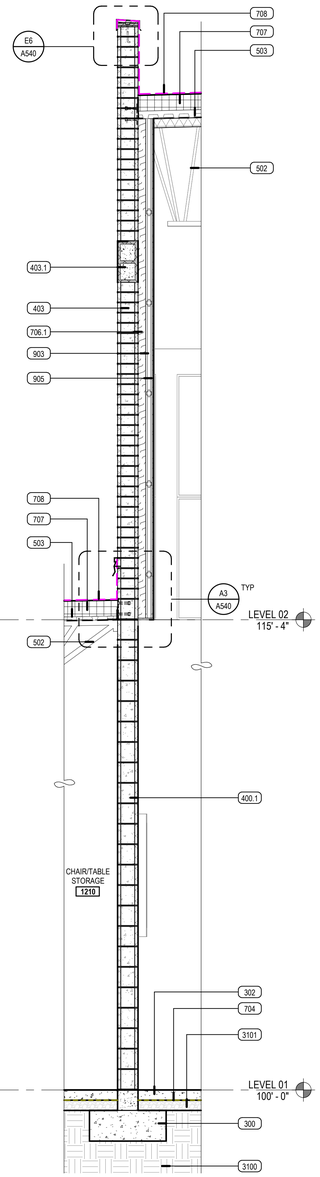
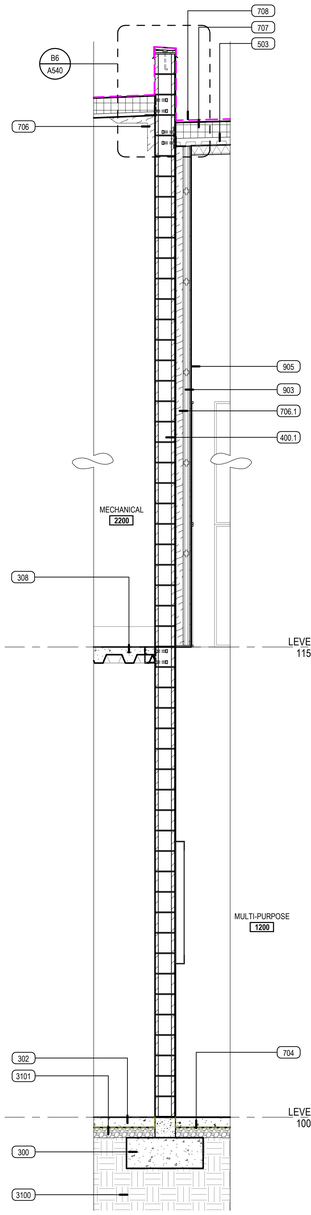


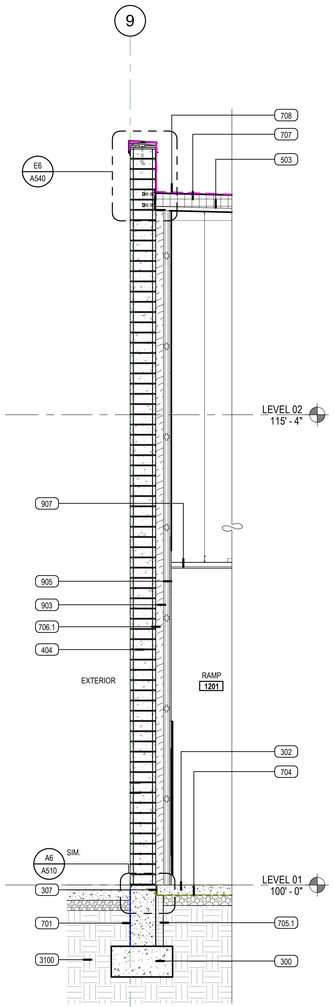
A1 WALL SECTION - 20.
SCALE: 1/2" = 1'-0"



A2 WALL SECTION - 21.
SCALE: 1/2" = 1'-0"



A3 WALL SECTION - 22.
SCALE: 1/2" = 1'-0"



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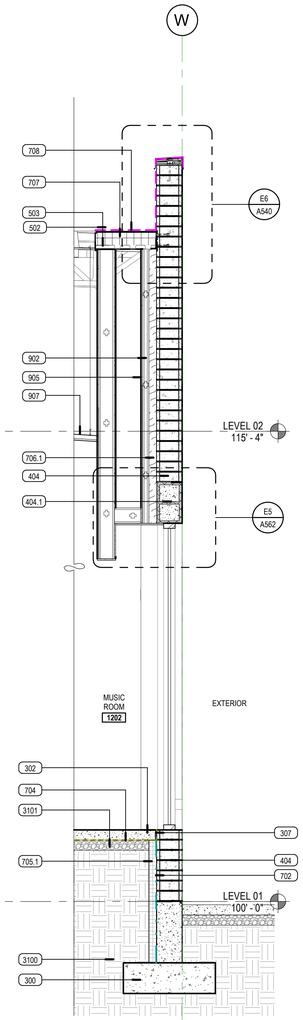
SCALE: 1/2" = 1'-0"



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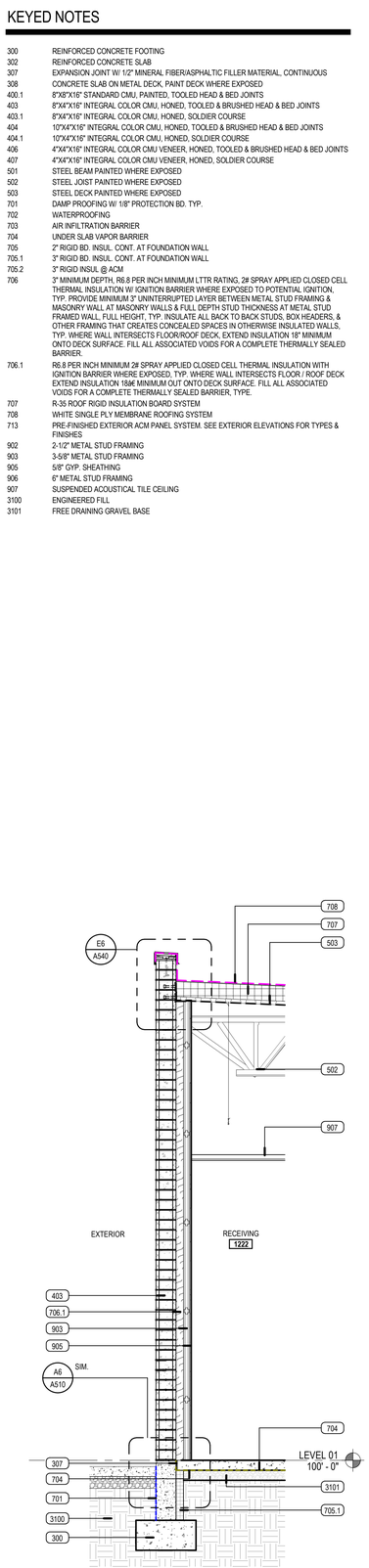
SCALE: 1/2" = 1'-0"



A6 WALL SECTION - 25.
SCALE: 1/2" = 1'-0"

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

WALL SECTIONS

A314

11/27/2023 12:45:10 PM

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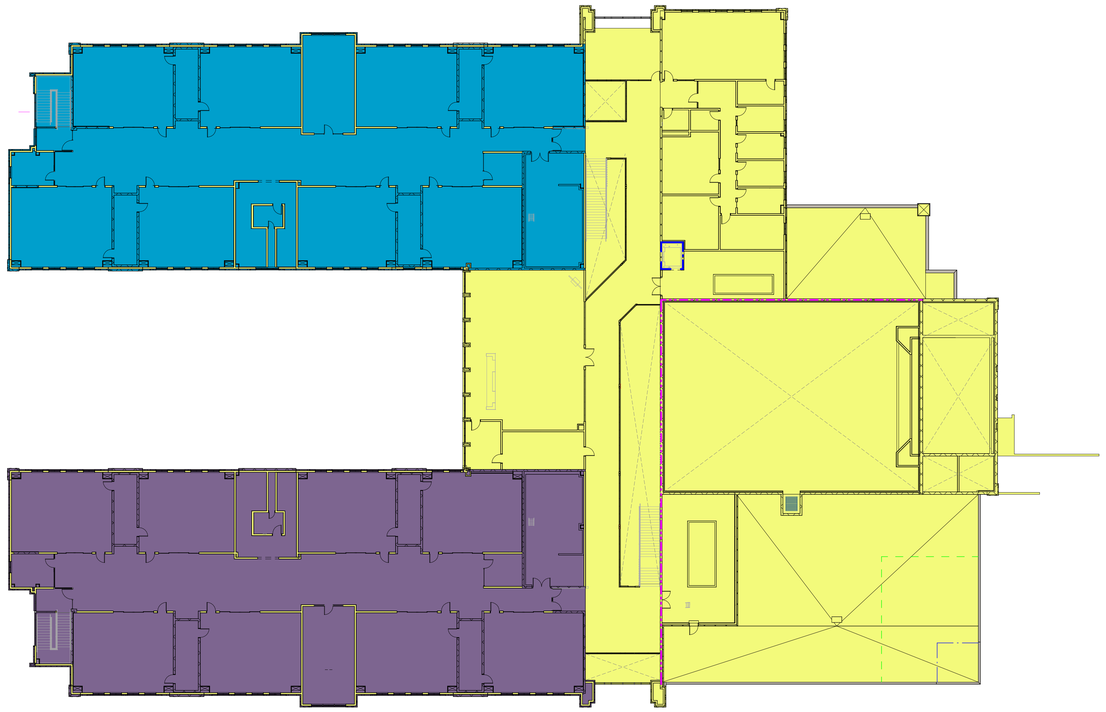
VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH — 7067969 — LICENSED ARCHITECT

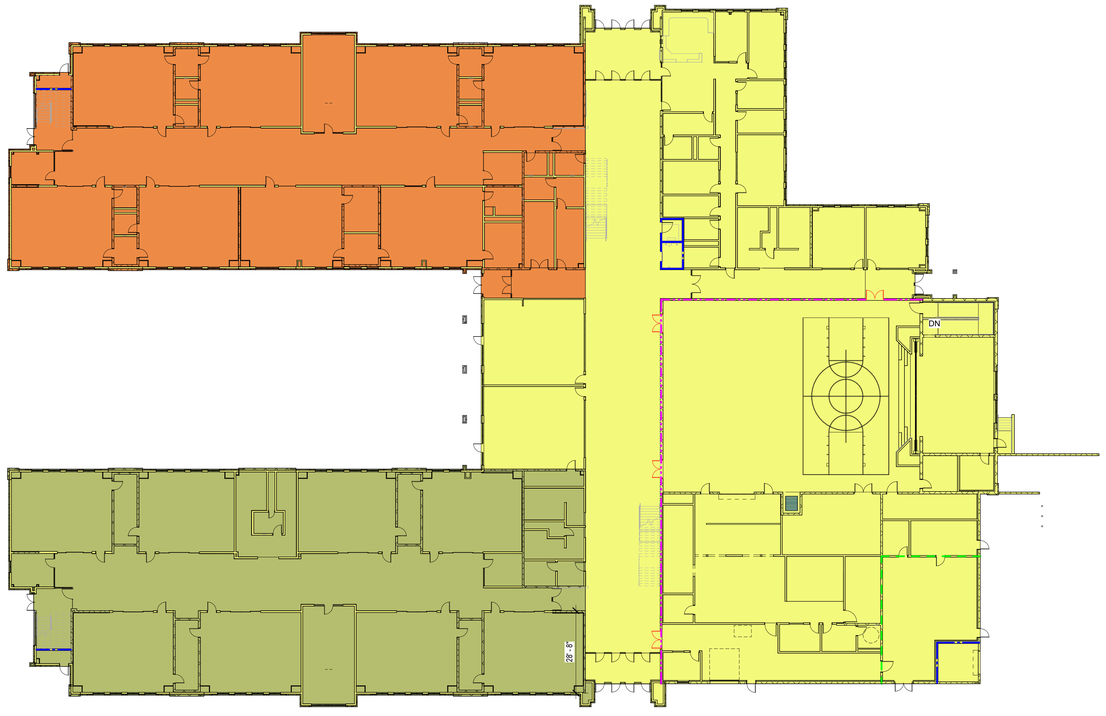
OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03
8	00/00/2023	ASI-03



C1 OVERALL UPPER LEVEL FLOOR PLAN

SCALE: 3/64" = 1'-0"



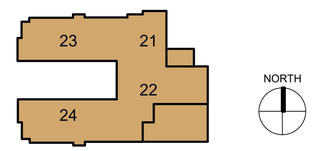
A1 OVERALL MAIN LEVEL FLOOR PLAN

SCALE: 3/64" = 1'-0"

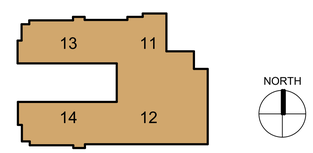
KEY - FINISH

Key Name	Finish - Description	Finish - Manufacturer	Finish - Name	Finish - Color	Finish - Comments	VCBO Finish Sorting	VCBO Finish Title
FLOOR							
F1	FIELD CARPET	PATCRAFT	CUBE & COLOR; 12X48	STAR ANISE	INSTALL METHOD; BRICK	1-FLOOR	FLOOR
F2	CARPET TILE - ACCENT COLOR PER AREA			REFER TO COLOR PLAN FOR ACCENT COLOR LOCATIONS		1-FLOOR	FLOOR
F2.1	CARPET TILE - ACCENT - ORANGE	PATCRAFT	CUBE & COLOR; FACET	TANGERINE	INSTALL METHOD; MONOLITHIC	1-FLOOR	FLOOR
F2.2	CARPET TILE - ACCENT - PURPLE	PATCRAFT	CUBE & COLOR; FACET	GRAPE	INSTALL METHOD; MONOLITHIC	1-FLOOR	FLOOR
F2.3	CARPET TILE - ACCENT - BLUE	PATCRAFT	CUBE & COLOR; FACET	BLUEBERRY	INSTALL METHOD; MONOLITHIC	1-FLOOR	FLOOR
F2.4	CARPET TILE - ACCENT - GREEN	PATCRAFT	CUBE & COLOR; FACET	PEAR	INSTALL METHOD; MONOLITHIC	1-FLOOR	FLOOR
F3	CARPET TILE FIELD W/ACCENT - YELLOW	PATCRAFT	CUBE & COLOR; 12X48	FIELD: STAR ANISE; ACCENT: LEMON	INSTALL METHOD: BRICK. PATTERN TO BE RANDOM MIX: 80% FIELD COLOR, 20% ACCENT COLOR	1-FLOOR	FLOOR
F4	CERAMIC FLOOR TILE	DALTILE	VOLUME 1.0, 6X6	AMPLIFY BLACK VL70	GROUT: CBP "644 SHADOW"	1-FLOOR	FLOOR
F5	QUARRY TILE	DALTILE	QUARRY TEXTURES 6X6	OT03 ASHEN GRAY MATTE	GROUT: CBP CSBA	1-FLOOR	FLOOR
F6	POLISHED CONCRETE			CLEAR		1-FLOOR	FLOOR
F7	STAINED & SEALED CONCRETE	--	--	CSBA** (GRAY TINT)	STAIN COLOR CSBA. SEAL W/ LITHIUM SEALER-DENSIFIER-HARDENER,TINTED GRAY	1-FLOOR	FLOOR
F8	ENTRY CARPET	SHAW	PORTAL TILE 5T109	LAVA		1-FLOOR	FLOOR
F9	BROADLOOM CARPET	SHAW	GRADIENT	CSBA		1-FLOOR	FLOOR
F10	RESILIENT SPORTS FLOORING	TARKETT	OMNISPORTS SPEED 3.9MM	CSBA	INCLUDES STANDARD COLOR GAME STRIPING	1-FLOOR	FLOOR
F11	PRECAST CONCRETE TREADS/LANDING	BRAILSFORD		CLEAR	PROVIDE SMOOTH FINISH ON UNDERSIDE OF EXPOSED TREADS	1-FLOOR	FLOOR
BASE							
B1	RUBBER BASE	JOHNSONITE		20 CHARCOAL WG		2-BASE	BASE
B2	QUARRY TILE BASE, COVED	DALTILE	QUARRY TEXTURES 6X4	MATCH FLOOR TILE	GROUT: CBP CSBA	2-BASE	BASE
B3	NO BASE				CAULK BETWEEN FLOOR AND WALL. SEE ELEVATIONS FOR LOCATIONS WHERE WALL TILE EXTENDS TO FLOOR.	2-BASE	BASE
B4	COVED STAINLESS STEEL BASE					2-BASE	BASE
B5	CERAMICTILE BASE, COVED	DALTILE	VOLUME 1.0, 6X4	MATCH FLOOR TILE		2-BASE	BASE
PAINT							
P1	PAINT - GENERAL	SHERWIN WILLIAMS	SW 7006 EXTRA WHITE	WHITE	--	3-PAINT	PAINT
P2	PAINT - ACCENT COLOR PER AREA			REFER TO COLOR PLAN FOR ACCENT COLOR LOCATIONS		3-PAINT	PAINT
P2.1	PAINT - ACCENT - ORANGE	PPG		PPG 1197-7 CARMELIZED ORANGE		3-PAINT	PAINT
P2.2	PAINT - ACCENT - PURPLE	PPG		PPG 1176-6 MIRABELLA		3-PAINT	PAINT
P2.3	PAINT - ACCENT - BLUE	PPG		PPG 1240-5 SORCERER		3-PAINT	PAINT
P2.4	PAINT - ACCENT - GREEN	PPG		PPG 1222-5 LIME GREEN		3-PAINT	PAINT
P3.1	PAINT - ACCENT - MEDIUM ORANGE	PPG		PPG 1195-7 FIELD POPPY		3-PAINT	PAINT
P3.2	PAINT - ACCENT - DARK ORANGE	PPG		PPG 1189-7 TEABERRY BLOSSOM		3-PAINT	PAINT
P4.1	PAINT - ACCENT - MEDIUM PURPLE	PPG		PPG 1251-7 GRAPE JUICE		3-PAINT	PAINT
P4.2	PAINT - ACCENT - DARK PURPLE	PPG		PPG 1177-7 PANSY PETAL		3-PAINT	PAINT
P5.1	PAINT - ACCENT - MEDIUM BLUE	PPG		PPG 1240-7 COBALT GLAZE		3-PAINT	PAINT
P5.2	PAINT - ACCENT - DARK BLUE	SHERWIN WILLIAMS		SW 6804 DIGNITY BLUE		3-PAINT	PAINT
P6.1	PAINT - ACCENT - MEDIUM GREEN	PPG		PPG 1222-6 ASPARAGUS		3-PAINT	PAINT
P6.2	PAINT - ACCENT - DARK GREEN	PPG		PPG 1120-7 MINT LEAVES		3-PAINT	PAINT
P7	PAINT FINISH	SHERWIN WILLIAMS		SW 7643 PUSSYWILLOW		3-PAINT	PAINT
P8	PAINT FINISH - METAL STRINGERS	PPG		PPG 1001-6 KNIGHTS ARMOR	METAL STRINGERS	3-PAINT	PAINT
P9	PAINT FINISH	SHERWIN WILLIAMS		SW 6258 TRICORN BLACK	ANY VISIBLE MECHANICAL, STRUCTURE, WALLS, SURFACES BEHIND PERFORATED METAL PANELS AND BEHIND SUSPENDED WOOD PANEL CEILING SYSTEM	3-PAINT	PAINT
SURFACE							
S1	SOLID SURFACE COUNTERTOPS	LG HAUSYS	HI-MACS	M553 EBONY CONCRETE		4-SURFACE	SURFACE
S2	PLASTIC LAMINATE; BASE CABINET BODIES/DOORS/DRAWERS	PIONITE	CW431 POLISHED VELVET	MILLWORK CHERRY		4-SURFACE	SURFACE
S3	PLASTIC LAMINATE, COUNTERTOPS	WILSONART	5016-38 FINE VELVET FINISH	FRENCH LINEN		4-SURFACE	SURFACE
S4	SOLID SURFACE @ SILLS	LG HAUSYS	HI-MACS	T017 ANDROMEDA		4-SURFACE	SURFACE
S5	QUARTZ COUNTERTOPS @ RECEPTION & MEDIA DESKS, KITCHEN SERVING COUNTER	CAMBRIA		WHITNEY		4-SURFACE	SURFACE
S6	HARDWOOD		CHERRY	CLEAR		4-SURFACE	SURFACE
WALL							
W1	PAINT FINISH - GENERAL COLOR W/ACCENT ABOVE			SEE PAINT SCHEDULE ABOVE	PAINT P1 TO 7'-0" AFF, WITH AREA ACCENT COLOR ABOVE, UNO	5-WALL	WALL
W2	HONED STANDARD CMU	AMCOR	HONED CMU, SEALED	PEWTER	CONCAVE TOOLED & BRUSHED JOINTS	5-WALL	WALL
W3	HONED INTEGRAL COLORED CMU	AMCOR	HONED CMU, SEALED	AMBER GRAY	CONCAVE TOOLED & BRUSHED JOINTS	5-WALL	WALL
W4	HONED INTEGRAL COLORED CMU VENEER	AMCOR	HONED CMU, SEALED	AMBER GRAY		5-WALL	WALL
W5	PORCELAIN TILE - GENERAL	AMERICAN OLEAN	MONTESANO: 15X30	MN70 WHITE	INSTALL VERTICAL STACKED PATTERN, SET ABOVE SCHEDULED BASE TO 5'-4" AFF. PAINT WALL ABOVE P1 TO CEILING, UNO	5-WALL	WALL
W6	HARDWOOD PANELING OVER PAINTED WALL FINISH		CHERRY	CLEAR	SEE INTERIOR ELEVATIONS FOR WOOD PANEL PATTERN. PAINT WALL BEHIND PER INTERIOR ELEVATIONS. WHERE NOT CALLED OUT, PAINT P5.2.	5-WALL	WALL
W7	CERAMIC TILE FINISH - FULL HEIGHT	CROSSVILLE	SHADES: 12X24	FROST - HONED FINISH	12"X24", INSTALL VERTICAL STACKED PATTERN FULL HEIGHT	5-WALL	WALL
W8	CERAMIC TILE FINISH W/PAINT ABOVE	CROSSVILLE	SHADES: 12X24	FROST - HONED FINISH	12"X24", INSTALL VERTICAL STACKED PATTERN TO 7'-0" AFF. PAINT GYP. WALL ABOVE P1 TO CEILING, UNO	5-WALL	WALL
W9	HARDWOOD PANELING OVER HONED CMU WALL FINISH		CHERRY	CLEAR	SEE INTERIOR ELEVATIONS FOR WOOD PANEL PATTERN	5-WALL	WALL
W10	MDF PANELING		4'x8' PANELS	PAINTED, COLOR VARIES	SEE INTERIOR ELEVATIONS FOR PAINT COLOR @ PORTALS. PAINT P9 AT MULTIPURPOSE	5-WALL	WALL
W11	PERFORATED METAL PANEL OVER W10			STAINLESS STEEL, #4 BRUSHED FINISH		5-WALL	WALL
DOORS							
D1	HOLLOW METAL DOORS & FRAMES & DOOR LIGHTS - GENERAL	SHERWIN WILLIAMS		SW 7643 PUSSYWILLOW	ALL LOCATIONS EXCEPT CLASSROOMS, UNO	6-DOORS	DOORS
D2	HOLLOW METAL DOORS & FRAMES & DOOR LIGHTS - @CLASSROOM ENTRIES			REFER TO COLOR PLAN FOR ACCENT COLOR LOCATIONS	@CLASSROOMS	6-DOORS	DOORS
D3	WOOD DOORS		VT CHERRY VENEER	CLEAR FINISH CL07		6-DOORS	DOORS

KEY PLAN - UPPER LEVEL



KEY PLAN - MAIN LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
BRENT N. WILDE
7057869
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
1	08/28/2023	BP2 - ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

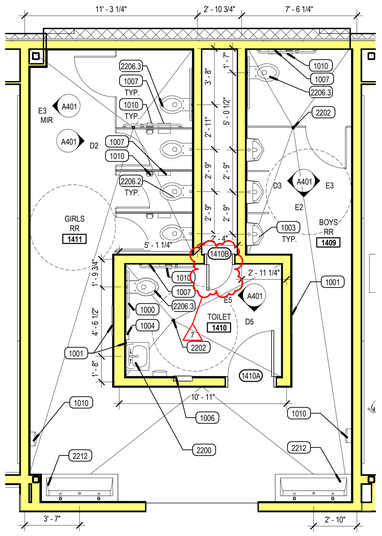
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

FINISH LEGEND + SCHEDULE

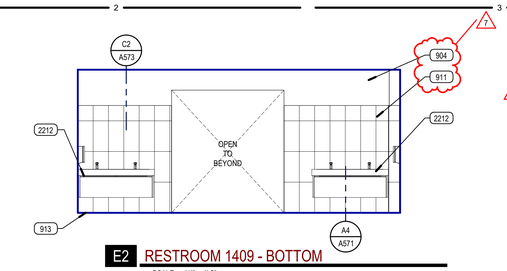
A400

11/8/2023 11:21:10 PM



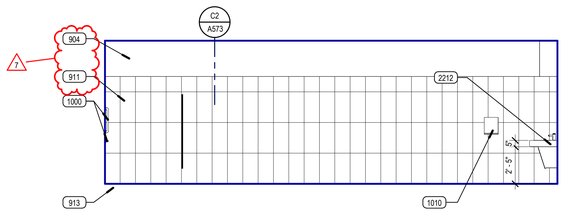
D1 ENLARGED TOILET ROOMS 1409 &1410 & 1411

SCALE: 1/4" = 1'-0"



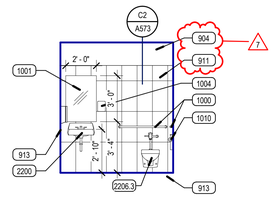
E2 RESTROOM 1409 - BOTTOM

SCALE: 1/4" = 1'-0"



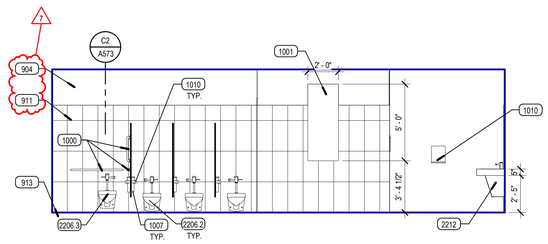
E3 RESTROOM 1409 - RIGHT

SCALE: 1/4" = 1'-0"



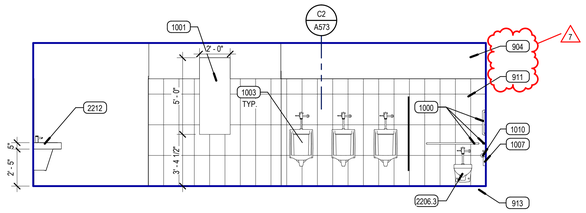
E5 TOILET 1410 - LEFT

SCALE: 1/4" = 1'-0"



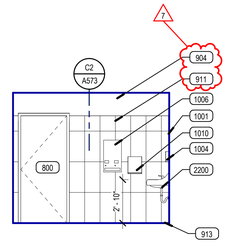
D2 TOILET 1411 - RIGHT

SCALE: 1/4" = 1'-0"



D3 RESTROOM 1409 - LEFT

SCALE: 1/4" = 1'-0"



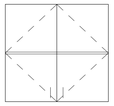
D5 TOILET 1410 - BOTTOM

SCALE: 1/4" = 1'-0"

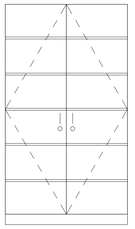
ARCHITECTURAL MILLWORK KEY

EXAMPLE:

B 1 1 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- ONE DOOR
- ONE DRAWER
- BASE CABINET *



W 0 2 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- TWO DOORS
- ZERO DRAWERS
- WALL CABINET *



T 0 2 5 L
- ACCESSORY (IF NOTED)
- FIVE ADJUSTABLE SHELVES
- TWO DOORS
- ZERO DRAWERS
- TALL CABINET *

* NOTE:

SB	DENOTES SINK BASE CABINET
TW	DENOTES TALL WARDROBE CABINET
FMD	DENOTES FRAMED PERFORATED METAL PANEL DOOR
FGD	DENOTES FRAMED GLASS PANEL DOOR

** NOTE:

L	DENOTES LOCKS AT DOOR (S) / DRAWER (S)
F	DENOTES FILE DRAWER (S)

CABINET MEASUREMENTS SHOWN ARE ACTUAL SIZES. BASE CABINET HEIGHTS ALLOW FOR A COUNTERTOP 1 1/2" THICK. CABINET DEPTHS ARE MEASURED FROM THE BACK TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE)

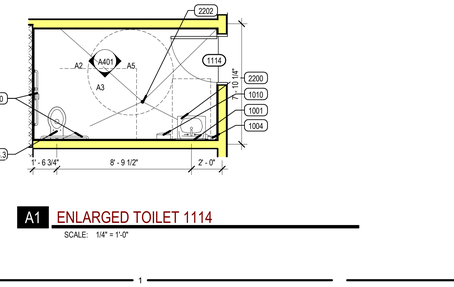
ALL CABINET INTERIORS, WHETHER CONCEALED BEHIND DOORS OR OPEN, ARE STANDARD MELAMINE LAMINATE AS PER SPECIFICATIONS.

MILLWORK LEGEND

1. MILLWORK DIMENSION NUMBERS ARE WIDTH X HEIGHT X DEPTH.
2. ALL MILLWORK DIMENSIONED FROM BASE TO TOP OF IDENTIFIED COUNTERTOP, TYP
3. CABINET DEPTHES ARE MEASURED FROM THE WALL TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE).
4. PROVIDE BASE AT ALL CABINET TOE SPACE, UNLESS NOTED OTHERWISE.
5. PROVIDE GROMMET WHERE "G" IS LABELED ON PLANOS OR ELEVATIONS.
6. ALL COUNTERTOPS TO HAVE A 4" BACKSPLASH, UNLESS NOTED OTHERWISE, TO MATCH COUNTERTOP, ON BACK AND SIDE WALLS.
7. PROVIDE FILLER PANELS TO SEAL SIDES AND TOPS OF ALL CABINETS PLACED AT AN ANGLE TO ADJACENT WALL(S).
8. ALL MILLWORK TO FINISHED ON ENDS, TYP.
9. CONTRACTOR TO PROVIDE BLOCKING BEHIND ALL CABINETS, COAT RACKS, PENCIL SHARPENER BLOCKS, T.V. BRACKETS AND PROJECTION SCREENS AS WELL AS ALL WALL MOUNTED ACCESSORIES, INCLUDING WHITE BOARDS, TACKBOARDS, TOILET AND URINAL PARTITIONS AND TOILET ROOM ACCESSORIES, ETC... NOTE: ONLY 2X WOOD BLOCKING IS ACCESPTABLE BEHIND MILLWORK AND TOILET ROOM PARTITIONS.
10. REFER TO SHEET **A400** FOR FINISH COLORS ON ALL MILLWORK AND CASEWORK.

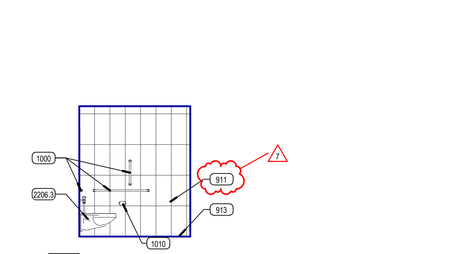
TYPICAL MILLWORK DETAILS

1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **B6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **D3/A570**
3. TYPICAL WALL HUNG RESTROOM MULTI-STATION COUNTER & SINK, PER DETAIL **A4/A571**
4. TYPICAL BASE CABINET WITH DOOR(S), PER DETAIL **C2/A570**
5. TYPICAL BASE CABINET WITH DRAWER(S), PER DETAIL **A3/A570**
6. TYPICAL BASE CABINET WITH DOOR(S) AND DRAWER, PER DTL **C5/A570**
7. TYPICAL BASE CABINET WITH TWO FILE DRAWERS, PER DTL **B1/A570**
8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **C6/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **E1/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **B3/A570**
11. TYPICAL SINK BASE CABINET, PER DETAIL **B4/A570**
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **A2/A570**
13. TYPICAL TALL CABINET WITH OPEN CUBBIES, PER DETAIL **A2/A572**
14. TYPICAL RECEPTION DESK WITH OPEN SPACE, PER DETAIL **A1/A570**
15. TYPICAL BOOKSHELF, PER DETAIL **A5/A570**



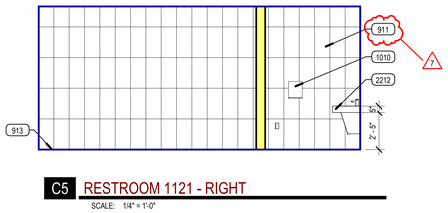
C1 ENLARGED TOILET ROOMS 1119 & 1120 & 1121

SCALE: 1/4" = 1'-0"



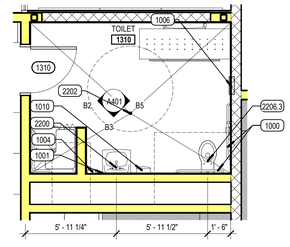
C3 RESTROOM 1121 - LEFT

SCALE: 1/4" = 1'-0"



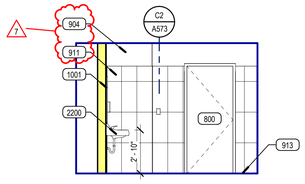
C5 RESTROOM 1121 - RIGHT

SCALE: 1/4" = 1'-0"



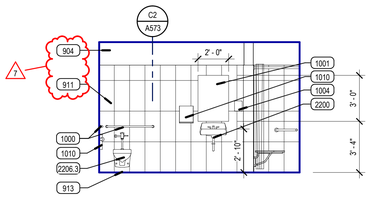
B1 ENLARGED TOILET 1310

SCALE: 1/4" = 1'-0"



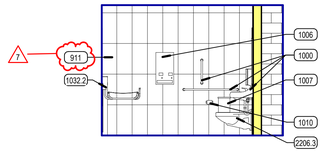
B2 TOILET 1310 - LEFT

SCALE: 1/4" = 1'-0"



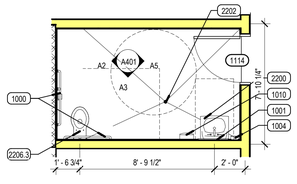
B3 TOILET 1310 - BOTTOM

SCALE: 1/4" = 1'-0"



B5 TOILET 1310 - RIGHT

SCALE: 1/4" = 1'-0"

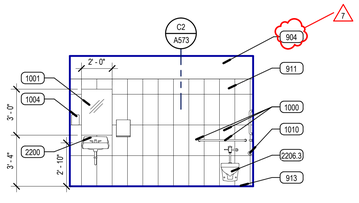


A1 ENLARGED TOILET 1114

SCALE: 1/4" = 1'-0"

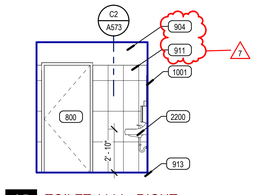
A2 TOILET 1114 - LEFT

SCALE: 1/4" = 1'-0"



A3 TOILET 1114 - BOTTOM

SCALE: 1/4" = 1'-0"



A5 TOILET 1114 - RIGHT

SCALE: 1/4" = 1'-0"

KEYED NOTES

800	DOOR & FRAME
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
911	CERAMIC WALL TILE
913	SCHEDULED BASE
1000	GRAB BAR
1001	MIRROR, 24"X36"
1003	URINAL SCREEN
1004	SOAP DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1006	SANITARY NAPKIN DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1007	SANITARY NAPKIN DISPOSAL
1010	TOILET PAPER DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1032.2	75.25" X 31" WALL MOUNTED ADJUSTABLE CHANGING TABLE, MOTORIZED
2200	SINK AND FAUCET
2201	JANITOR'S SINK
2202	FLOOR DRAIN, SEE DETAIL C3/A890
2206.2	TOILET, WALL MOUNT
2206.3	TOILET, ADA COMFORTABLE HEIGHT
2212	SS TROUGH SINK W/SOLID SURFACE APRON

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CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH
SHANE P. GOW
7067869
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03
8	00/00/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

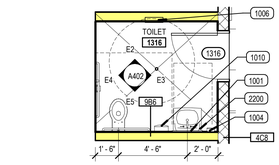
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLANS & INTERIOR ELEVATIONS

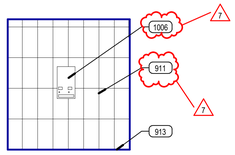
A401

11/27/2023 12:46:20 PM



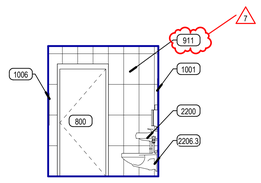
E1 ENLARGED TOILET ROOM 1316

SCALE: 1/4" = 1'-0"



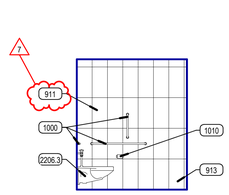
E2 TOILET 1316 - TOP

SCALE: 1/4" = 1'-0"



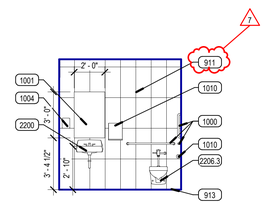
E3 TOILET 1316 - RIGHT

SCALE: 1/4" = 1'-0"



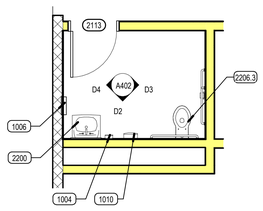
E4 TOILET 1316 - LEFT

SCALE: 1/4" = 1'-0"



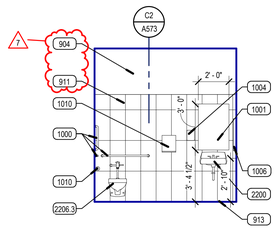
E5 TOILET 1316 - BOTTOM

SCALE: 1/4" = 1'-0"



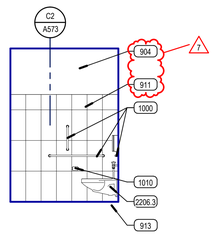
D1 ENLARGED FAMILY TOILET 2113

SCALE: 1/4" = 1'-0"



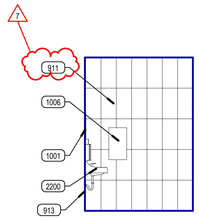
D2 TOILET 2113 - BOTTOM

SCALE: 1/4" = 1'-0"



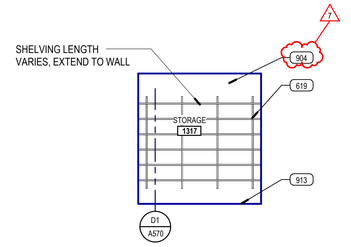
D3 TOILET 2113 - RIGHT

SCALE: 1/4" = 1'-0"



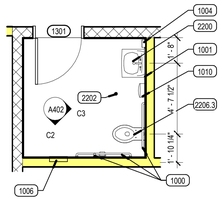
D4 TOILET 2113 - LEFT

SCALE: 1/4" = 1'-0"



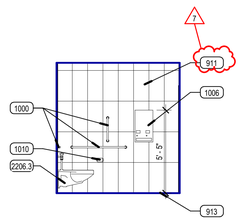
D5 STORAGE - TYP.

SCALE: 1/4" = 1'-0"



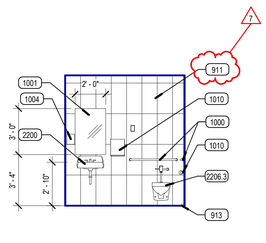
C1 ENLARGED TOILET 1301

SCALE: 1/4" = 1'-0"



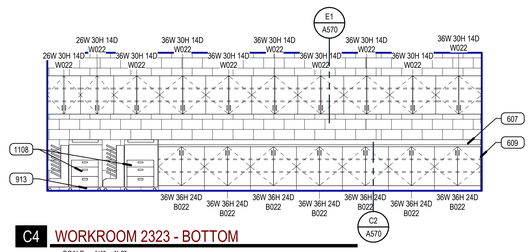
C2 TOILET 1301 - BOTTOM

SCALE: 1/4" = 1'-0"



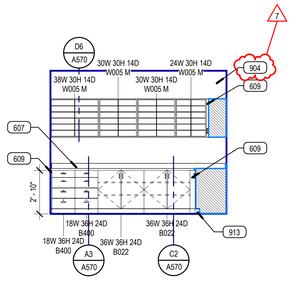
C3 TOILET 1301 - RIGHT

SCALE: 1/4" = 1'-0"



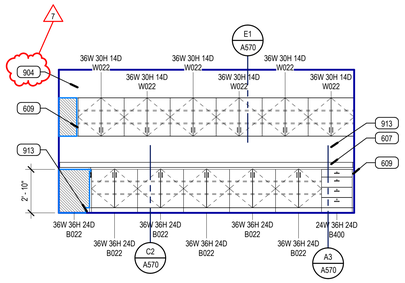
C4 WORKROOM 2323 - BOTTOM

SCALE: 1/4" = 1'-0"



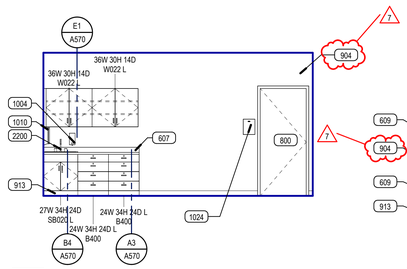
B1 WORK ROOM 1112 - LEFT

SCALE: 1/4" = 1'-0"



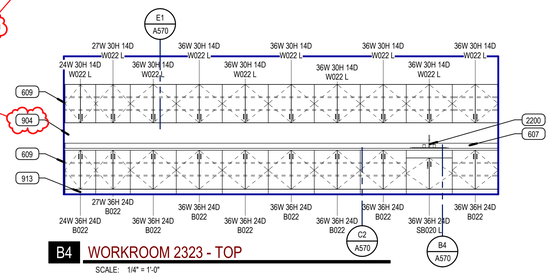
B2 WORK ROOM 1112 - TOP

SCALE: 1/4" = 1'-0"



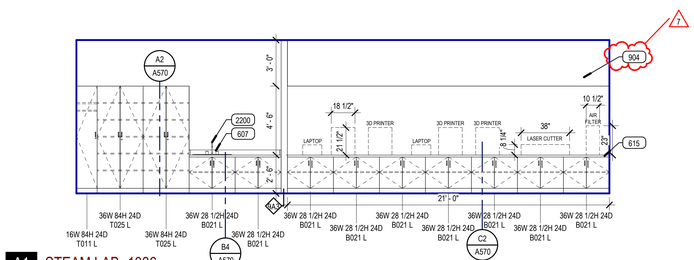
B3 NURSE ROOM- 1108 - BOTTOM

SCALE: 1/4" = 1'-0"



B4 WORKROOM 2323 - TOP

SCALE: 1/4" = 1'-0"

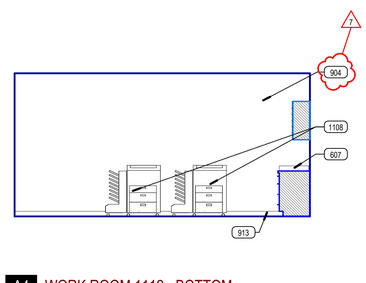


A1 STEAM LAB -1336

SCALE: 1/4" = 1'-0"

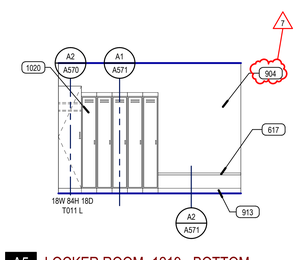
A3 FACULTY LOUNGE 1111- BOTTOM

SCALE: 1/4" = 1'-0"



A4 WORK ROOM 1112 - BOTTOM

SCALE: 1/4" = 1'-0"



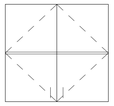
A5 LOCKER ROOM- 1219 - BOTTOM

SCALE: 1/4" = 1'-0"

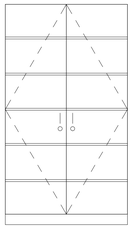
ARCHITECTURAL MILLWORK KEY

EXAMPLE:

B 1 1 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- ONE DOOR
- ONE DRAWER
- BASE CABINET *



W 0 2 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- TWO DOORS
- ZERO DRAWERS
- WALL CABINET *



T 0 2 5 L
- ACCESSORY (IF NOTED)
- FIVE ADJUSTABLE SHELVES
- TWO DOORS
- ZERO DRAWERS
- TALL CABINET *

* NOTE:

SB	DENOTES SINK BASE CABINET
TW	DENOTES TALL WARDROBE CABINET
FMD	DENOTES FRAMED PERFORATED METAL PANEL DOOR
FGD	DENOTES FRAMED GLASS PANEL DOOR

** NOTE:

L	DENOTES LOCKS AT DOOR (S) / DRAWER (S)
F	DENOTES FILE DRAWER (S)

CABINET MEASUREMENTS SHOWN ARE ACTUAL SIZES. BASE CABINET HEIGHTS ALLOW FOR A COUNTERTOP 1 1/2" THICK. CABINET DEPTHS ARE MEASURED FROM THE BACK TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE)

ALL CABINET INTERIORS, WHETHER CONCEALED BEHIND DOORS OR OPEN, ARE STANDARD MELAMINE LAMINATE AS PER SPECIFICATIONS.

MILLWORK LEGEND

1. MILLWORK DIMENSION NUMBERS ARE WIDTH X HEIGHT X DEPTH.
2. ALL MILLWORK DIMENSIONED FROM BASE TO TOP OF IDENTIFIED COUNTERTOP, TYP
3. CABINET DEPTHES ARE MEASURED FROM THE WALL TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE).
4. PROVIDE BASE AT ALL CABINET TOE SPACE, UNLESS NOTED OTHERWISE.
5. PROVIDE GROMMET WHERE "G" IS LABELED ON PLANOS OR ELEVATIONS.
6. ALL COUNTERTOPS TO HAVE A 4" BACKSPLASH, UNLESS NOTED OTHERWISE, TO MATCH COUNTERTOP, ON BACK AND SIDE WALLS.
7. PROVIDE FILLER PANELS TO SEAL SIDES AND TOPS OF ALL CABINETS PLACED AT AN ANGLE TO ADJACENT WALL(S).
8. ALL MILLWORK TO FINISHED ON ENDS, TYP.
9. CONTRACTOR TO PROVIDE BLOCKING BEHIND ALL CABINETS, COAT RACKS, PENCIL SHARPENER BLOCKS, T.V. BRACKETS AND PROJECTION SCREENS AS WELL AS ALL WALL MOUNTED ACCESSORIES, INCLUDING WHITE BOARDS, TACKBOARDS, TOILET AND URINAL PARTITIONS AND TOILET ROOM ACCESSORIES, ETC... NOTE: ONLY 2X WOOD BLOCKING IS ACCESPTABLE BEHIND MILLWORK AND TOILET ROOM PARTITIONS.
10. REFER TO SHEET **A400** FOR FINISH COLORS ON ALL MILLWORK AND CASEWORK.

TYPICAL MILLWORK DETAILS

1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **B6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **D3/A570**
3. TYPICAL WALL HUNG RESTROOM MULTI-STATION COUNTER & SINK, PER DETAIL **A4/A571**
4. TYPICAL BASE CABINET WITH DOOR(S), PER DETAIL **C2/A570**
5. TYPICAL BASE CABINET WITH DRAWER(S), PER DETAIL **A3/A570**
6. TYPICAL BASE CABINET WITH DOOR(S) AND DRAWER, PER DTL **C5/A570**
7. TYPICAL BASE CABINET WITH TWO FILE DRAWERS, PER DTL **B1/A570**
8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **C6/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **E1/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **B3/A570**
11. TYPICAL SINK BASE CABINET, PER DETAIL **B4/A570**
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **A2/A570**
13. TYPICAL TALL CABINET WITH OPEN CUBBIES, PER DETAIL **A2/A572**
14. TYPICAL RECEPTION DESK WITH OPEN SPACE, PER DETAIL **A1/A570**
15. TYPICAL BOOKSHELF, PER DETAIL **A5/A570**

KEYED NOTES

607	PLASTIC LAMINATE COUNTERTOP
609	FILLER PANEL
615	QUARTZ SURFACING MATERIAL COUNTERTOP
617	WALL MOUNTED BENCH W/ HARDWOOD TOP AND GALVANIZED TUBE STEEL SUPPORTS
619	24" ADJUSTABLE SHELVING, U.N.O.
800	DOOR & FRAME
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
911	CERAMIC WALL TILE
913	SCHEDULED BASE
1000	GRAB BAR
1001	MIRROR, 24"X36"
1004	SOAP DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1006	SANITARY NAPKIN DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1010	TOILET PAPER DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1020	METAL LOCKER
1024	SIGNAGE, SEE SCHEDULE
1108	COPIER, NIC
1109	MICROWAVE
1110	REFRIGERATOR
1117	ICE DISPENSER
1132	ELECTRIC RANGE
2200	SINK AND FAUCET
2202	FLOOR DRAIN, SEE DETAIL C3/A890
2206.3	TOILET, ADA COMFORTABLE HEIGHT

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH
BRYAN P. SHEARER
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03
8	00/00/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

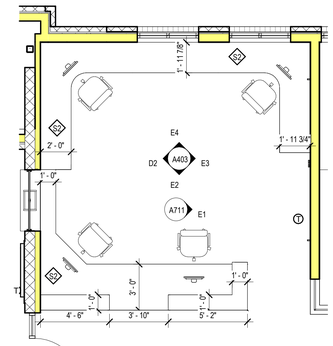
130 N. ECCLES AVE., OGDEN, UT 84404

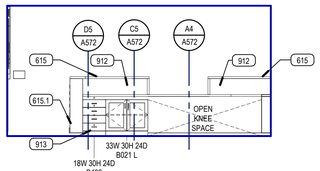
BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLANS & INTERIOR ELEVATIONS

A402

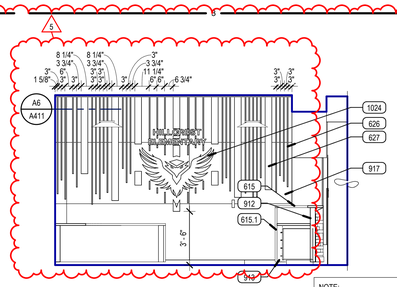
11/27/2023 12:45:30 PM





E2 RECEPTION - 1102 - DESK - BOTTOM

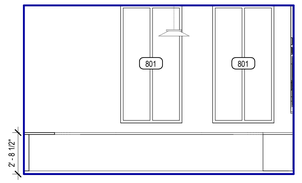
SCALE: 1/4" = 1'-0"



NOTE:
ARCHITECT TO PROVIDE DIGITAL FILE FOR PATTERN LAYOUT.

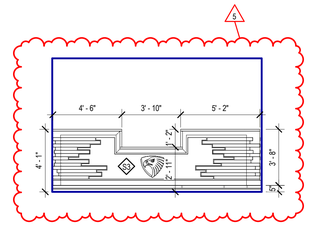
E3 RECEPTION - 1102 - DESK - RIGHT

SCALE: 1/4" = 1'-0"



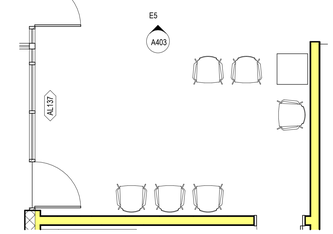
E4 RECEPTION - 1102 - DESK - TOP

SCALE: 1/4" = 1'-0"



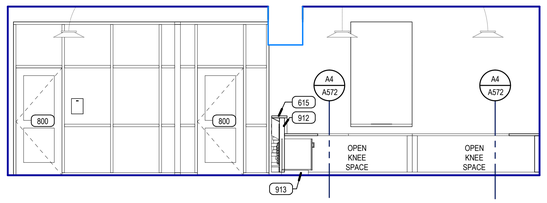
E5 RECEPTION - 1102 - DESK - FRONT

SCALE: 1/4" = 1'-0"



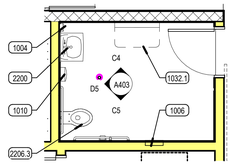
D1 ENLARGED PLAN RECEPTION - 1102

SCALE: 1/4" = 1'-0"



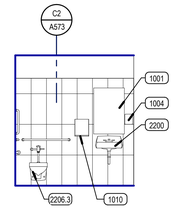
D2 RECEPTION - 1102 - DESK - LEFT

SCALE: 1/4" = 1'-0"



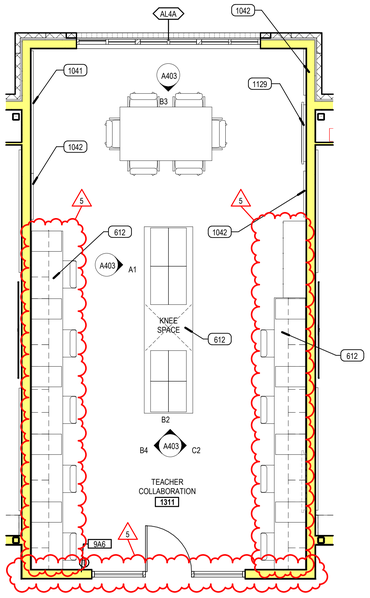
D4 FAMILY TOILET - 1330

SCALE: 1/4" = 1'-0"



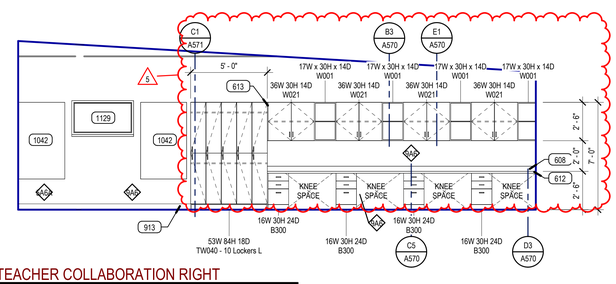
D5 FAMILY TOILET - 1330 - LEFT

SCALE: 1/4" = 1'-0"



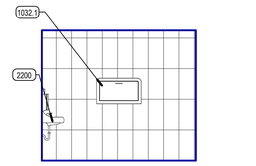
B1 ENLARGED TEACHER COLLABORATION

SCALE: 1/4" = 1'-0"



C2 TEACHER COLLABORATION RIGHT

SCALE: 1/4" = 1'-0"

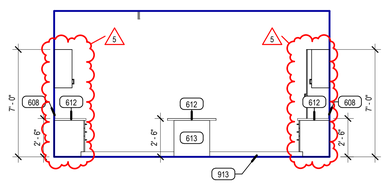


C4 FAMILY TOILET - 1330 - TOP

SCALE: 1/4" = 1'-0"

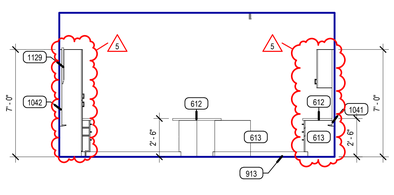
C5 FAMILY TOILET - 1330 - BOTTOM

SCALE: 1/4" = 1'-0"



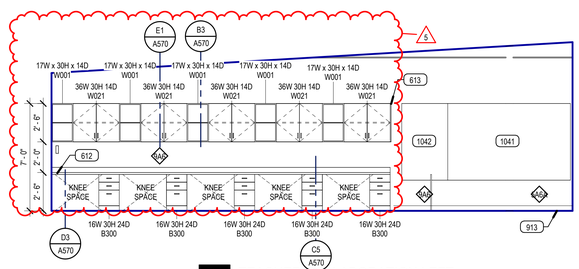
B2 TEACHER COLLABORATION TOP

SCALE: 1/4" = 1'-0"



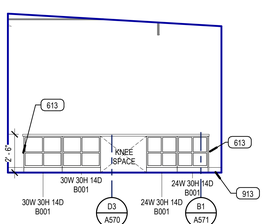
B3 TEACHER COLLABORATION BOTTOM

SCALE: 1/4" = 1'-0"



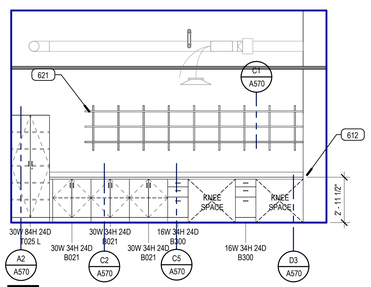
B4 TEACHER COLLABORATION LEFT

SCALE: 1/4" = 1'-0"



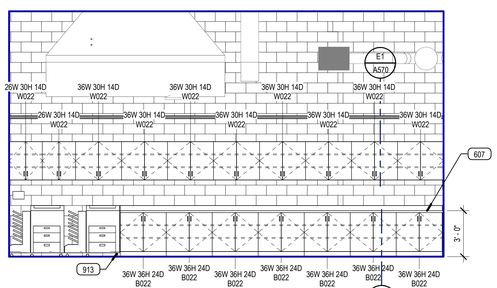
A1 TEACHER COLLABORATION ISLAND LEFT & RIGHT

SCALE: 1/4" = 1'-0"



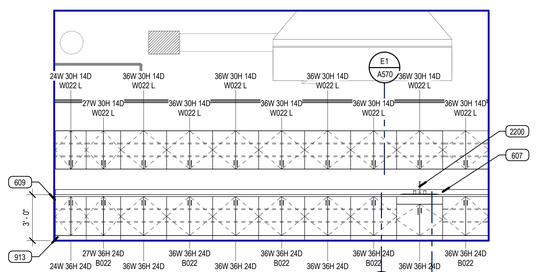
A2 SITE TECH OFFICE - 1331 - RIGHT

SCALE: 1/4" = 1'-0"



A3 WORKROOM - 2323 - BOTTOM

SCALE: 1/4" = 1'-0"

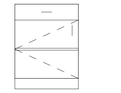


A4 WORKROOM - 2323 - TOP

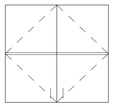
SCALE: 1/4" = 1'-0"

ARCHITECTURAL MILLWORK KEY

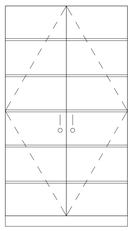
EXAMPLE:



B 1 1 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- ONE DOOR
- ONE DRAWER
- BASE CABINET *



W 0 2 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- TWO DOORS
- ZERO DRAWERS
- WALL CABINET *



T 0 2 5 L
- ACCESSORY (IF NOTED)
- FIVE ADJUSTABLE SHELVES
- TWO DOORS
- ZERO DRAWERS
- TALL CABINET *

* NOTE:

SB	DENOTES SINK BASE CABINET
TW	DENOTES TALL WARDROBE CABINET
FMD	DENOTES FRAMED PERFORATED METAL PANEL DOOR
FGD	DENOTES FRAMED GLASS PANEL DOOR

** NOTE:

L	DENOTES LOCKS AT DOOR (S) / DRAWER (S)
F	DENOTES FILE DRAWER (S)

CABINET MEASUREMENTS SHOWN ARE ACTUAL SIZES. BASE CABINET HEIGHTS ALLOW FOR A COUNTERTOP 1 1/2" THICK. CABINET DEPTHS ARE MEASURED FROM THE BACK TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE)

ALL CABINET INTERIORS, WHETHER CONCEALED BEHIND DOORS OR OPEN, ARE STANDARD MELAMINE LAMINATE AS PER SPECIFICATIONS.

MILLWORK LEGEND

1. MILLWORK DIMENSION NUMBERS ARE WIDTH X HEIGHT X DEPTH.
2. ALL MILLWORK DIMENSIONED FROM BASE TO TOP OF IDENTIFIED COUNTERTOP, TYP
3. CABINET DEPTHES ARE MEASURED FROM THE WALL TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE).
4. PROVIDE BASE AT ALL CABINET TOE SPACE, UNLESS NOTED OTHERWISE.
5. PROVIDE GROMMET WHERE "G" IS LABELED ON PLANOS OR ELEVATIONS.
6. ALL COUNTERTOPS TO HAVE A 4" BACKSPLASH, UNLESS NOTED OTHERWISE, TO MATCH COUNTERTOP, ON BACK AND SIDE WALLS.
7. PROVIDE FILLER PANELS TO SEAL SIDES AND TOPS OF ALL CABINETS PLACED AT AN ANGLE TO ADJACENT WALL(S).
8. ALL MILLWORK TO FINISHED ON ENDS, TYP.
9. CONTRACTOR TO PROVIDE BLOCKING BEHIND ALL CABINETS, COAT RACKS, PENCIL SHARPENER BLOCKS, T.V. BRACKETS AND PROJECTION SCREENS AS WELL AS ALL WALL MOUNTED ACCESSORIES, INCLUDING WHITE BOARDS, TACKBOARDS, TOILET AND URINAL PARTITIONS AND TOILET ROOM ACCESSORIES, ETC... NOTE: ONLY 2X WOOD BLOCKING IS ACCESPTABLE BEHIND MILLWORK AND TOILET ROOM PARTITIONS.
10. REFER TO SHEET **A400** FOR FINISH COLORS ON ALL MILLWORK AND CASEWORK

TYPICAL MILLWORK DETAILS

1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **B6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **D3/A570**
3. TYPICAL WALL HUNG RESTROOM MULTI-STATION COUNTER & SINK, PER DETAIL **A4/A571**
4. TYPICAL BASE CABINET WITH DOOR(S), PER DETAIL **C2/A570**
5. TYPICAL BASE CABINET WITH DRAWER(S), PER DETAIL **A3/A570**
6. TYPICAL BASE CABINET WITH DOOR(S) AND DRAWER, PER DTL **C5/A570**
7. TYPICAL BASE CABINET WITH TWO FILE DRAWERS, PER DTL **B1/A570**
8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **C6/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **E1/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **B3/A570**
11. TYPICAL SINK BASE CABINET, PER DETAIL **B4/A570**
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **A2/A570**
13. TYPICAL TALL CABINET WITH OPEN CUBBIES, PER DETAIL **A2/A572**
14. TYPICAL RECEPTION DESK WITH OPEN SPACE, PER DETAIL **A1/A570**
15. TYPICAL BOOKSHELF, PER DETAIL **A5/A570**

KEYED NOTES

607	PLASTIC LAMINATE COUNTERTOP
608	BACK SPLASH
609	FILLER PANEL
612	SOLID SURFACE COUNTERTOP
613	FINISHED END PANEL
615	QUARTZ SURFACING MATERIAL COUNTERTOP
615.1	QUARTZ SURFACING MATERIAL END PANEL
621	24" ADJUSTABLE SHELVING, 3 SHELVES, U.N.O.
626	WALL MOUNTED 3/4" X 2" WOOD SLATS, LENGTH TO BE PROVIDED BY ARCHITECT, CSBA
627	WALL MOUNTED 5 1/4" X 3/4" WOOD SLATS, LENGTH TO BE PROVIDED BY ARCHITECT, CSBA
800	DOOR & FRAME
801	WINDOW SYSTEM
912	TACKABLE WALL SURFACE, TO 8'-0" ACCENT COLOR ABOVE
913	SCHEDULED BASE
917	MDF WALL PANEL, PAINTED
1001	MIRROR, 24"X36"
1004	SOAP DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1006	SANITARY NAPKIN DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1010	TOILET PAPER DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1024	SIGNAGE, SEE SCHEDULE
1032.1	WALL MOUNTED CHANGING TABLE
1041	96"X60" WHITE BOARD
1042	36"X60" WHITE BOARD
1129	DISPLAY TV, 55"
2200	SINK AND FAUCET
2206.3	TOILET, ADA COMFORTABLE HEIGHT

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — KEVIN C. CHRISTENSEN — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLANS & INTERIOR ELEVATIONS

A403

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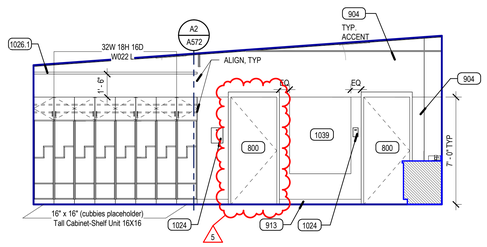
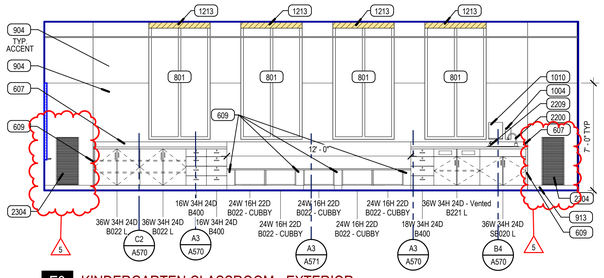


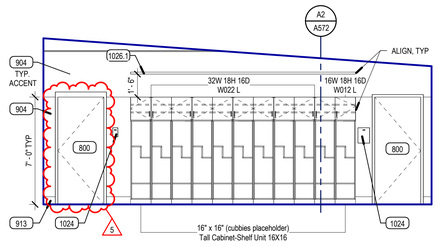
E1 KINDERGARTEN CLASSROOM - CUBBIES 2

SCALE: 1/4" = 1'-0"



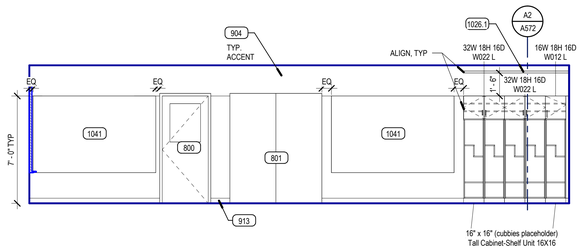
E3 KINDERGARTEN CLASSROOM - EXTERIOR

SCALE: 1/4" = 1'-0"



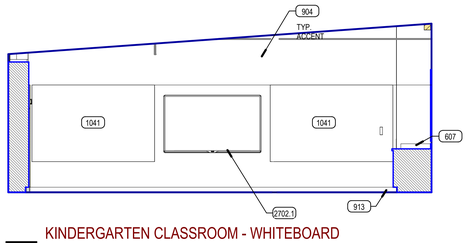
E5 KINDERGARTEN CLASSROOM - CUBBIES 1

SCALE: 1/4" = 1'-0"



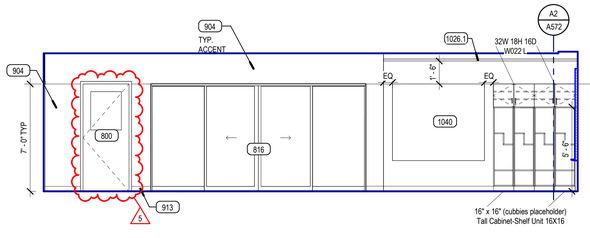
D1 RESOURCE CLASSROOM - TOP

SCALE: 1/4" = 1'-0"



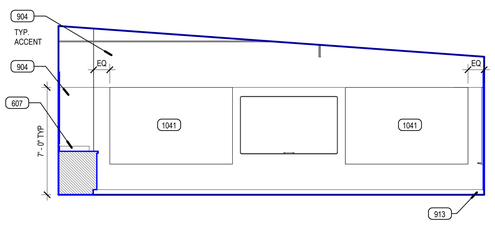
D3 KINDERGARTEN CLASSROOM - WHITEBOARD WALL

SCALE: 1/4" = 1'-0"



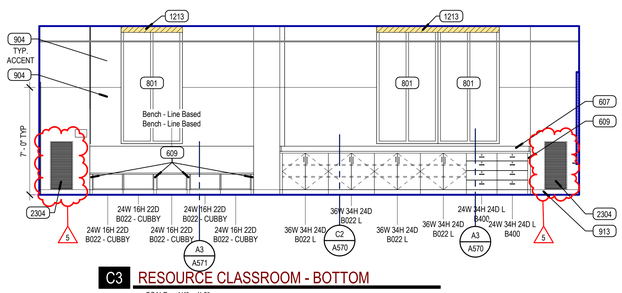
D5 KINDERGARTEN CLASSROOM - ENTRY WALL

SCALE: 1/4" = 1'-0"



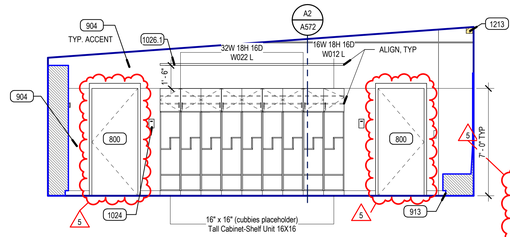
C1 RESOURCE CLASSROOM - LEFT

SCALE: 1/4" = 1'-0"



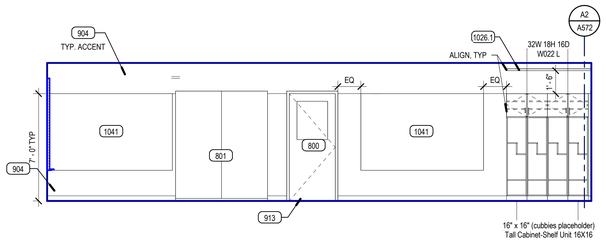
C3 RESOURCE CLASSROOM - BOTTOM

SCALE: 1/4" = 1'-0"



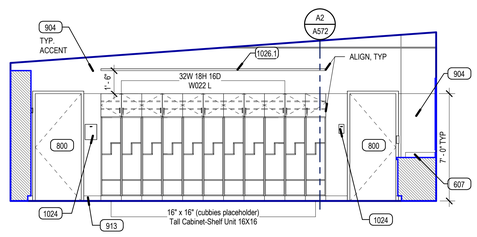
C5 RESOURCE CLASSROOM -RIGHT

SCALE: 1/4" = 1'-0"



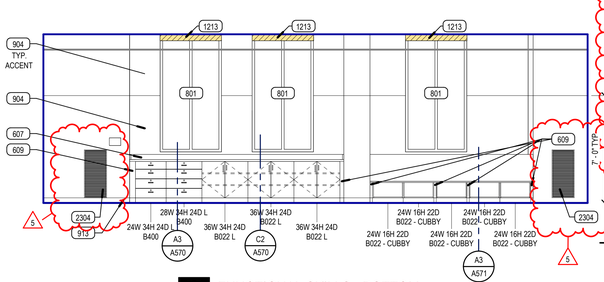
B1 FUNCTIONAL SKILLS - TOP

SCALE: 1/4" = 1'-0"



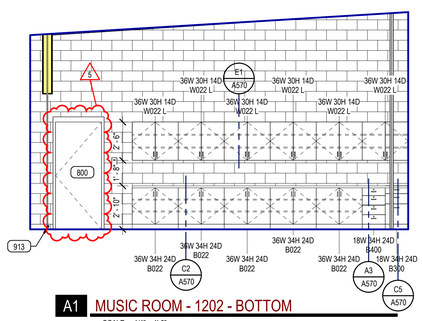
B3 FUNCTIONAL SKILLS - RIGHT

SCALE: 1/4" = 1'-0"



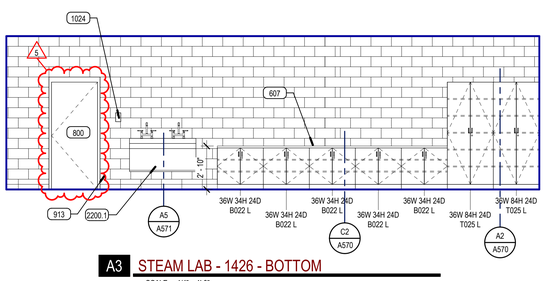
B5 FUNCTIONAL SKILLS - BOTTOM

SCALE: 1/4" = 1'-0"



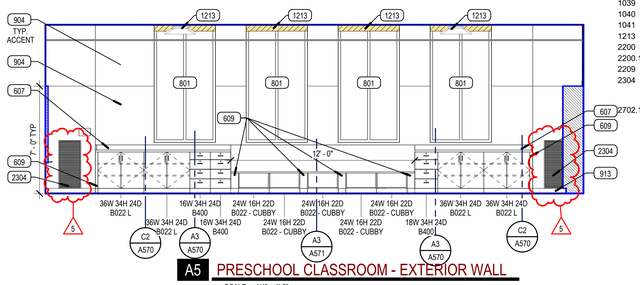
A1 MUSIC ROOM - 1202 - BOTTOM

SCALE: 1/4" = 1'-0"



A3 STEAM LAB - 1426 - BOTTOM

SCALE: 1/4" = 1'-0"



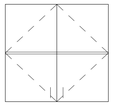
A5 PRESCHOOL CLASSROOM - EXTERIOR WALL

SCALE: 1/4" = 1'-0"

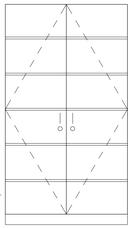
ARCHITECTURAL MILLWORK KEY

EXAMPLE:

B 1 1 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- ONE DOOR
- ONE DRAWER
- BASE CABINET *



W 0 2 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- TWO DOORS
- ZERO DRAWERS
- WALL CABINET *



T 0 2 5 L
- ACCESSORY (IF NOTED)
- FIVE ADJUSTABLE SHELVES
- TWO DOORS
- ZERO DRAWERS
- TALL CABINET *

* NOTE:

SB	DENOTES SINK BASE CABINET
TW	DENOTES TALL WARDROBE CABINET
FMD	DENOTES FRAMED PERFORATED METAL PANEL DOOR
FGD	DENOTES FRAMED GLASS PANEL DOOR

** NOTE:

L	DENOTES LOCKS AT DOOR (S) / DRAWER (S)
F	DENOTES FILE DRAWER (S)

CABINET MEASUREMENTS SHOWN ARE ACTUAL SIZES. BASE CABINET HEIGHTS ALLOW FOR A COUNTERTOP 1 1/2" THICK. CABINET DEPTHS ARE MEASURED FROM THE BACK TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE)

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MILLWORK LEGEND

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5. PROVIDE GROMMET WHERE "G" IS LABELED ON PLANOS OR ELEVATIONS.
6. ALL COUNTERTOPS TO HAVE A 4" BACKSPLASH, UNLESS NOTED OTHERWISE, TO MATCH COUNTERTOP, ON BACK AND SIDE WALLS.
7. PROVIDE FILLER PANELS TO SEAL SIDES AND TOPS OF ALL CABINETS PLACED AT AN ANGLE TO ADJACENT WALL(S).
8. ALL MILLWORK TO FINISHED ON ENDS, TYP.
9. CONTRACTOR TO PROVIDE BLOCKING BEHIND ALL CABINETS, COAT RACKS, PENCIL SHARPENER BLOCKS, T.V. BRACKETS AND PROJECTION SCREENS AS WELL AS ALL WALL MOUNTED ACCESSORIES, INCLUDING WHITE BOARDS, TACKBOARDS, TOILET AND URINAL PARTITIONS AND TOILET ROOM ACCESSORIES, ETC... NOTE: ONLY 2X WOOD BLOCKING IS ACCESPTABLE BEHIND MILLWORK AND TOILET ROOM PARTITIONS.
10. REFER TO SHEET **A4/00** FOR FINISH COLORS ON ALL MILLWORK AND CASEWORK

TYPICAL MILLWORK DETAILS

1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **B6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **D3/A570**
3. TYPICAL WALL HUNG RESTROOM MULTI-STATION COUNTER & SINK, PER DETAIL **A4/A571**
4. TYPICAL BASE CABINET WITH DOOR(S), PER DETAIL **C2/A570**
5. TYPICAL BASE CABINET WITH DRAWER(S), PER DETAIL **A3/A570**
6. TYPICAL BASE CABINET WITH DOOR(S) AND DRAWER, PER DTL **C5/A570**
7. TYPICAL BASE CABINET WITH TWO FILE DRAWERS, PER DTL **B1/A570**
8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **C6/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **E1/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **B3/A570**
11. TYPICAL SINK BASE CABINET, PER DETAIL **B4/A570**
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **A2/A570**
13. TYPICAL TALL CABINET WITH OPEN CUBBIES, PER DETAIL **A2/A572**
14. TYPICAL RECEPTION DESK WITH OPEN SPACE, PER DETAIL **A1/A570**
15. TYPICAL BOOKSHELF, PER DETAIL **A5/A570**

KEYED NOTES

607	PLASTIC LAMINATE COUNTERTOP
609	FILLER PANEL
800	DOOR & FRAME
801	WINDOW SYSTEM
816	14' ALUMINUM SLIDING GLASS DOOR
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
913	SCHEDULED BASE
1004	SOAP DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1010	TOILET PAPER DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1024	SIGNAGE, SEE SCHEDULE
1026.1	SS MAGNETIC STRIP, 1 1/2
1039	48"X60" WHITE BOARD
1040	72"X60" WHITE BOARD
1041	96"X60" WHITE BOARD
1213	ROLLER WINDOW SHADES
2200	SINK AND FAUCET
2200.1	SINK AND FAUCET - DOUBLE
2209	BUBBLER
2304	RETURN AIR CHASE AND MECHANICAL GRILLE, W/ MTL. STUD FRAMING & GYP. BD. SURROUND. SEE PLANS & INT. ELEVATIONS. PAINT INSIDE OF CHASE WALLS BLACK.
2702.1	WALL MOUNTED TV/MONITOR OWNER PROVIDED CONTRACTOR INSTALLED

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH · REGISTERED · 7067969 · LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLANS & INTERIOR ELEVATIONS

A404

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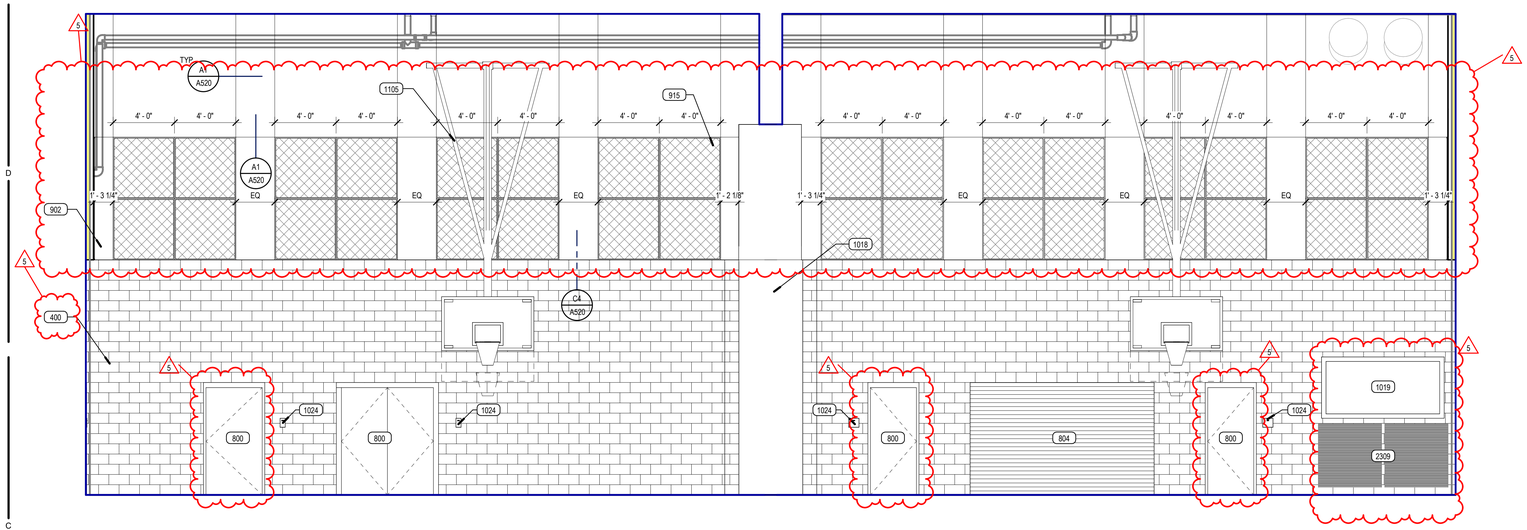
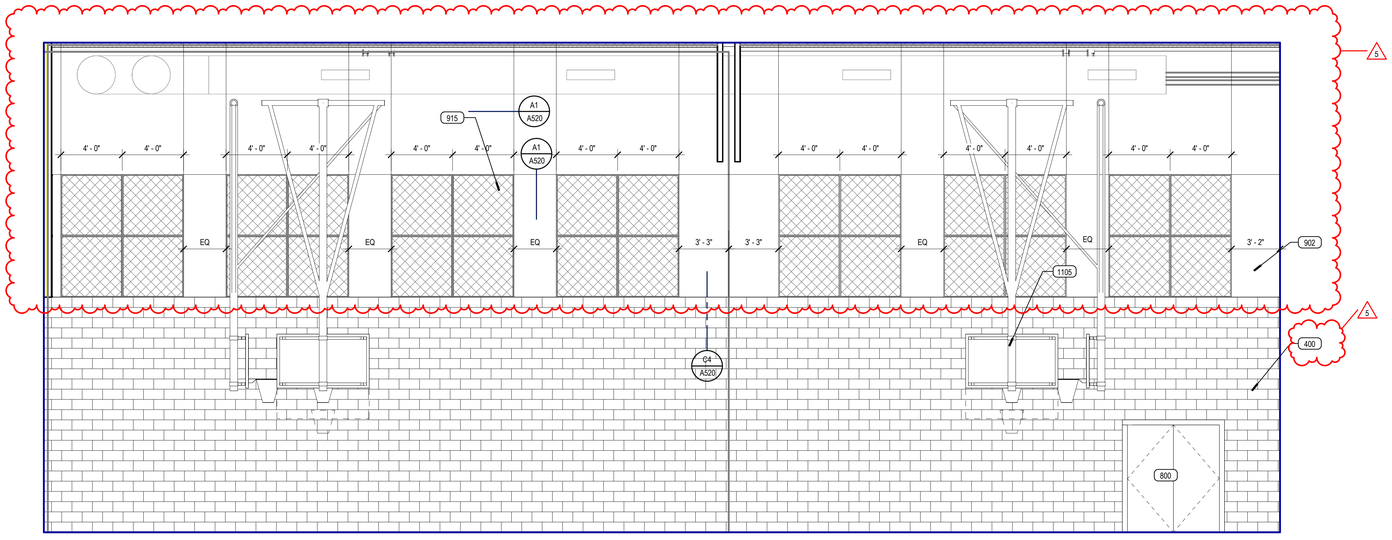


C1 MULTI-PURPOSE - 1200 - BOTTOM

SCALE: 1/4" = 1'-0"



A1 MULTI-PURPOSE - 1200 - TOP

SCALE: 1/4" = 1'-0"

ARCHITECTURAL MILLWORK KEY

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B 1 1 1 **
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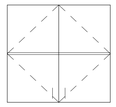

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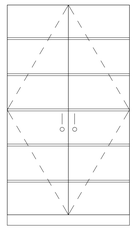

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1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **B6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **D3/A570**
3. TYPICAL WALL HUNG RESTROOM MULTI-STATION COUNTER & SINK, PER DETAIL **A4/A571**
4. TYPICAL BASE CABINET WITH DOOR(S), PER DETAIL **C2/A570**
5. TYPICAL BASE CABINET WITH DRAWER(S), PER DETAIL **A3/A570**
6. TYPICAL BASE CABINET WITH DOOR(S) AND DRAWER, PER DTL **C5/A570**
7. TYPICAL BASE CABINET WITH TWO FILE DRAWERS, PER DTL **B1/A570**
8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **C6/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **E1/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **B3/A570**
11. TYPICAL SINK BASE CABINET, PER DETAIL **B4/A570**
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **A2/A570**
13. TYPICAL TALL CABINET WITH OPEN CUBBIES, PER DETAIL **A2/A572**
14. TYPICAL RECEPTION DESK WITH OPEN SPACE, PER DETAIL **A1/A570**
15. TYPICAL BOOKSHELF, PER DETAIL **A5/A570**

KEYED NOTES

400	8"X8"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
800	DOOR & FRAME
804	OVERHEAD COILING DOOR
902	2-1/2" METAL STUD FRAMING
915	ACOUSTICAL TECTUM PANELS
1018	ACCORDION FOLDING PARTITION
1019	BULLETIN BOARD, 4'X 8' ANODIZED ALUMINUM FRAME, WALL MOUNTED
1024	SIGNAGE, SEE SCHEDULE
1105	ADJUSTABLE BASKETBALL STANDARD, MOTORIZED RETRACTABLE, FRONT FOLDING
2309	MECHANICAL GRILLE. SEE MECHANICAL FOR GRILLE TYPE

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — LICENSED ARCHITECT — 7067868

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

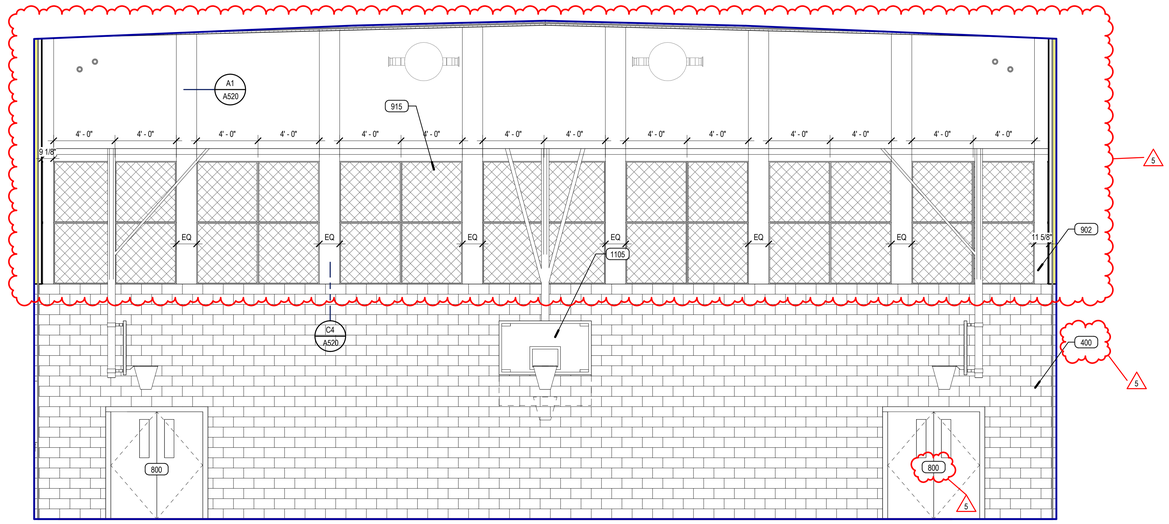
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLANS & INTERIOR ELEVATIONS

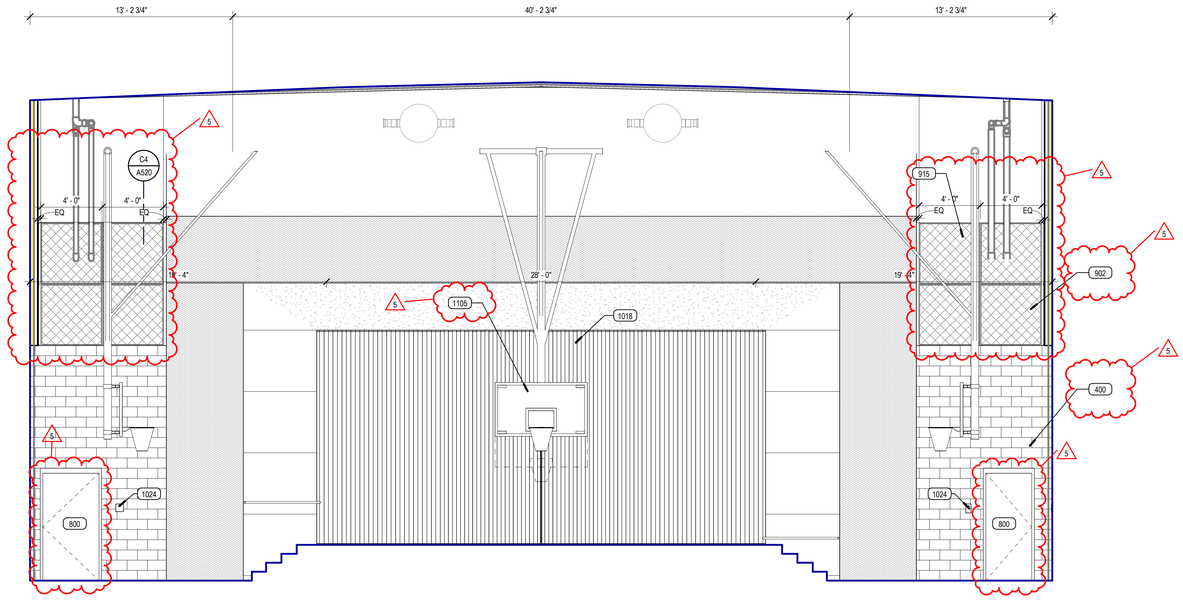
A405

11/17/2023 12:36:08 PM



C1 MULTI-PURPOSE 1200 - LEFT

SCALE: 1/4" = 1'-0"



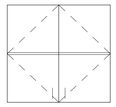
A1 MULTI-PURPOSE 1200 - RIGHT

SCALE: 1/4" = 1'-0"

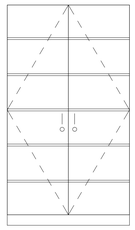
ARCHITECTURAL MILLWORK KEY

EXAMPLE:

B 1 1 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- ONE DOOR
- ONE DRAWER
- BASE CABINET *



W 0 2 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- TWO DOORS
- ZERO DRAWERS
- WALL CABINET *



T 0 2 5 L
- ACCESSORY (IF NOTED)
- FIVE ADJUSTABLE SHELVES
- TWO DOORS
- ZERO DRAWERS
- TALL CABINET *

* NOTE:

SB	DENOTES SINK BASE CABINET
TW	DENOTES TALL WARDROBE CABINET
FMD	DENOTES FRAMED PERFORATED METAL PANEL DOOR
FGD	DENOTES FRAMED GLASS PANEL DOOR

** NOTE:

L	DENOTES LOCKS AT DOOR (S) / DRAWER (S)
F	DENOTES FILE DRAWER (S)

CABINET MEASUREMENTS SHOWN ARE ACTUAL SIZES. BASE CABINET HEIGHTS ALLOW FOR A COUNTERTOP 1 1/2" THICK. CABINET DEPTHS ARE MEASURED FROM THE BACK TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE)

ALL CABINET INTERIORS, WHETHER CONCEALED BEHIND DOORS OR OPEN, ARE STANDARD MELAMINE LAMINATE AS PER SPECIFICATIONS.

MILLWORK LEGEND

1. MILLWORK DIMENSION NUMBERS ARE WIDTH X HEIGHT X DEPTH.
2. ALL MILLWORK DIMENSIONED FROM BASE TO TOP OF IDENTIFIED COUNTERTOP, TYP
3. CABINET DEPTHES ARE MEASURED FROM THE WALL TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE).
4. PROVIDE BASE AT ALL CABINET TOE SPACE, UNLESS NOTED OTHERWISE.
5. PROVIDE GROMMET WHERE "G" IS LABELED ON PLANOS OR ELEVATIONS.
6. ALL COUNTERTOPS TO HAVE A 4" BACKSPLASH, UNLESS NOTED OTHERWISE, TO MATCH COUNTERTOP, ON BACK AND SIDE WALLS.
7. PROVIDE FILLER PANELS TO SEAL SIDES AND TOPS OF ALL CABINETS PLACED AT AN ANGLE TO ADJACENT WALL(S).
8. ALL MILLWORK TO FINISHED ON ENDS, TYP.
9. CONTRACTOR TO PROVIDE BLOCKING BEHIND ALL CABINETS, COAT RACKS, PENCIL SHARPENER BLOCKS, T.V. BRACKETS AND PROJECTION SCREENS AS WELL AS ALL WALL MOUNTED ACCESSORIES, INCLUDING WHITE BOARDS, TACKBOARDS, TOILET AND URINAL PARTITIONS AND TOILET ROOM ACCESSORIES, ETC.... NOTE: ONLY 2X WOOD BLOCKING IS ACCESPTABLE BEHIND MILLWORK AND TOILET ROOM PARTITIONS.
10. REFER TO SHEET **A400** FOR FINISH COLORS ON ALL MILLWORK AND CASEWORK.

TYPICAL MILLWORK DETAILS

1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **B6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **D3/A570**
3. TYPICAL WALL HUNG RESTROOM MULTI-STATION COUNTER & SINK, PER DETAIL **A4/A571**
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7. TYPICAL BASE CABINET WITH TWO FILE DRAWERS, PER DTL **B1/A570**
8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **C6/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **E1/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **B3/A570**
11. TYPICAL SINK BASE CABINET, PER DETAIL **B4/A570**
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **A2/A570**
13. TYPICAL TALL CABINET WITH OPEN CUBBIES, PER DETAIL **A2/A572**
14. TYPICAL RECEPTION DESK WITH OPEN SPACE, PER DETAIL **A1/A570**
15. TYPICAL BOOKSHELF, PER DETAIL **A5/A570**

KEYED NOTES

400	8"X8"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
800	DOOR & FRAME
902	2-1/2" METAL STUD FRAMING
915	ACOUSTICAL TECTUM PANELS
1018	ACCORDION FOLDING PARTITION
1024	SIGNAGE, SEE SCHEDULE
1105	ADJUSTABLE BASKETBALL STANDARD, MOTORIZED RETRACTABLE, FRONT FOLDING

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STATE OF UTAH
BRENT P. SHEFFIELD
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LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

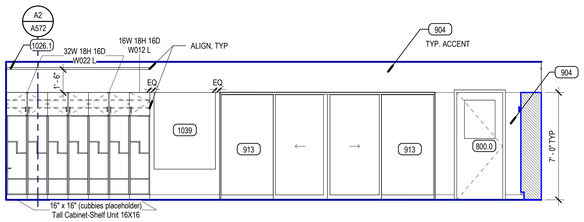
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLANS & INTERIOR ELEVATIONS

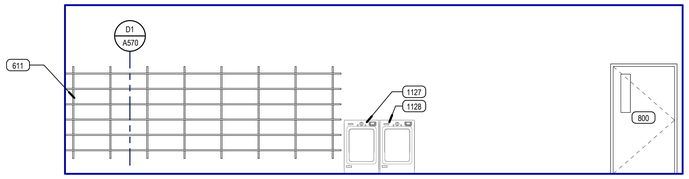
A406

11/17/2023 12:36:16 PM



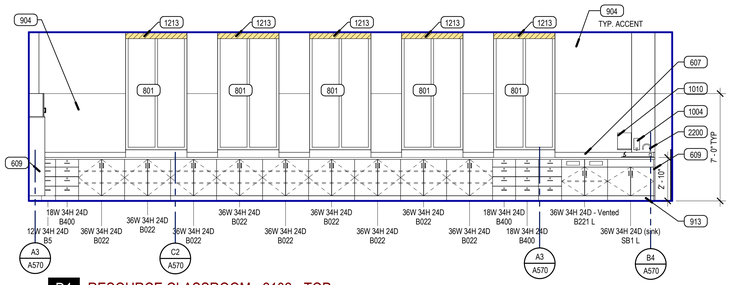
E1 KINDERGARTEN CLASSROMM - BOTTOM

SCALE: 1/4" = 1'-0"



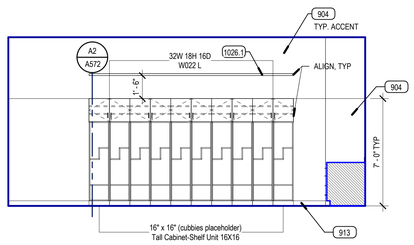
E3 RECEIVING - TOP

SCALE: 1/4" = 1'-0"



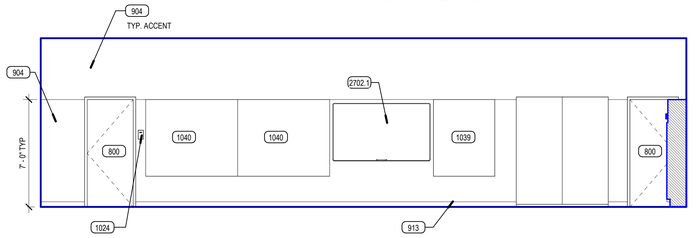
D1 RESOURCE CLASSROOM - 2102 - TOP

SCALE: 1/4" = 1'-0"



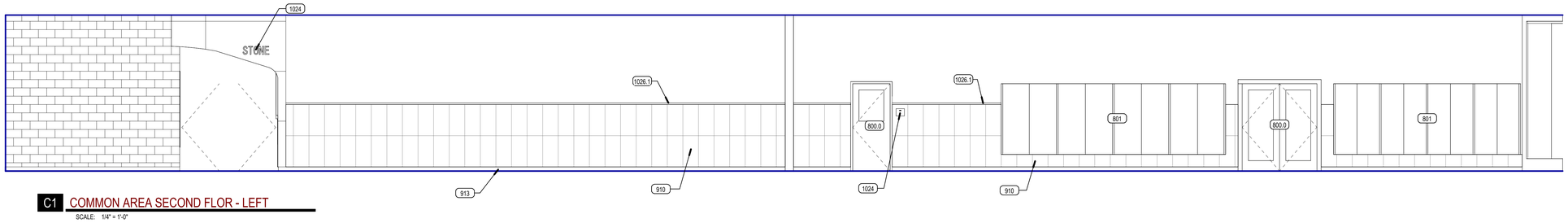
D3 RESOURCE CLASSROOM - 2102 - LEFT

SCALE: 1/4" = 1'-0"



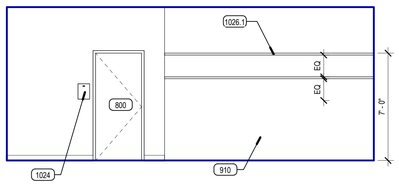
D4 RESOURCE CLASSROOM - 2102 - BOTTOM

SCALE: 1/4" = 1'-0"



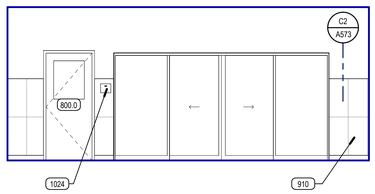
C1 COMMON AREA SECOND FLOR - LEFT

SCALE: 1/4" = 1'-0"



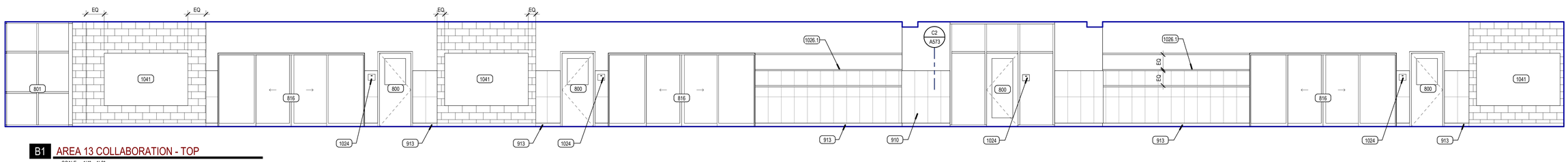
B2 AREA 13 - COLLABORATION - BOTTOM

SCALE: 1/4" = 1'-0"



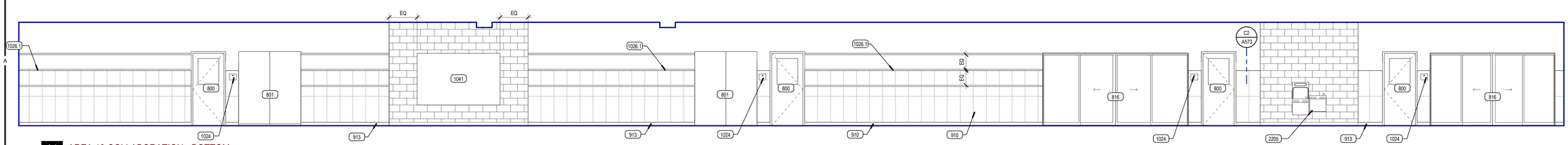
B4 AREA 13 - COLLABORATION - TOP

SCALE: 1/4" = 1'-0"



B1 AREA 13 COLLABORATION - TOP

SCALE: 1/4" = 1'-0"



A1 AREA 13 COLLABORATION - BOTTOM

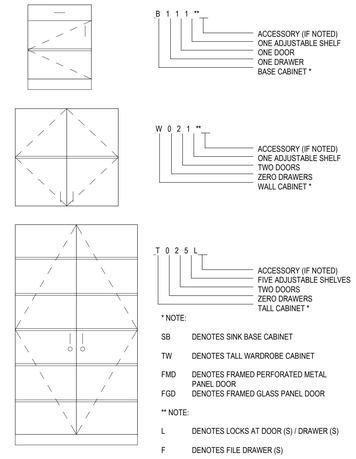
SCALE: 1/4" = 1'-0"

KEYED NOTES

607	PLASTIC LAMINATE COUNTERTOP
609	FILLER PANEL
611	16" ADJUSTABLE SHELVING, U.N.O.
800	DOOR & FRAME
800.0	
801	WINDOW SYSTEM
816	14" ALUMINUM SLIDING GLASS DOOR
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
910	15 X 30 PORCELAIN CERAMIC WALL TILE WAINSCOT
913	SCHEDULED BASE
1004	SOAP DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1010	TOILET PAPER DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1024	SIGNAGE, SEE SCHEDULE
1026.1	SS MAGNETIC STRIP, 1 1/2
1039	48"X60" WHITE BOARD
1040	72"X60" WHITE BOARD
1041	96"X60" WHITE BOARD
1127	WASHER
1128	DRYER
1213	ROLLER WINDOW SHADES
2200	SINK AND FAUCET
2205	DRINKING FOUNTAINS HIGH/LOW, W/ BOTTLE FILLER OVER LOWER FOUNTAIN
2702.1	84" WALL MOUNTED TV/MONITOR

ARCHITECTURAL MILLWORK KEY

EXAMPLE:



* NOTE:

SB	DENOTES SINK BASE CABINET
TW	DENOTES TALL WARDROBE CABINET
FMD	DENOTES FRAMED PERFORATED METAL PANEL DOOR
FGD	DENOTES FRAMED GLASS PANEL DOOR

** NOTE:

L	DENOTES LOCKS AT DOOR (S) / DRAWER (S)
F	DENOTES FILE DRAWER (S)

CABINET MEASUREMENTS SHOWN ARE ACTUAL SIZES. BASE CABINET HEIGHTS ALLOW FOR A COUNTERTOP 1 1/2" THICK. CABINET DEPTHS ARE MEASURED FROM THE BACK TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE)

ALL CABINET INTERIORS, WHETHER CONCEALED BEHIND DOORS OR OPEN, ARE STANDARD MELAMINE LAMINATE AS PER SPECIFICATIONS.

MILLWORK LEGEND

1. MILLWORK DIMENSION NUMBERS ARE WIDTH X HEIGHT X DEPTH.
2. ALL MILLWORK DIMENSIONED FROM BASE TO TOP OF IDENTIFIED COUNTERTOP, TYP
3. CABINET DEPTHES ARE MEASURED FROM THE WALL TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE).
4. PROVIDE BASE AT ALL CABINET TOE SPACE, UNLESS NOTED OTHERWISE.
5. PROVIDE GROMMET WHERE "G" IS LABELED ON PLANOS OR ELEVATIONS.
6. ALL COUNTERTOPS TO HAVE A 4" BACKSPLASH, UNLESS NOTED OTHERWISE, TO MATCH COUNTERTOP, ON BACK AND SIDE WALLS.
7. PROVIDE FILLER PANELS TO SEAL SIDES AND TOPS OF ALL CABINETS PLACED AT AN ANGLE TO ADJACENT WALL(S).
8. ALL MILLWORK TO FINISHED ON ENDS, TYP.
9. CONTRACTOR TO PROVIDE BLOCKING BEHIND ALL CABINETS, COAT RACKS, PENCIL SHARPENER BLOCKS, T.V. BRACKETS AND PROJECTION SCREENS AS WELL AS ALL WALL MOUNTED ACCESSORIES, INCLUDING WHITE BOARDS, TACKBOARDS, TOILET AND URINAL PARTITIONS AND TOILET ROOM ACCESSORIES, ETC.... NOTE: ONLY 2X WOOD BLOCKING IS ACCESPTABLE BEHIND MILLWORK AND TOILET ROOM PARTITIONS.
10. REFER TO SHEET **A400** FOR FINISH COLORS ON ALL MILLWORK AND CASEWORK.

TYPICAL MILLWORK DETAILS

1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **E6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **xx/A570**
3. TYPICAL RESTROOM COUNTERTOP, PER DETAIL **xx/A570**
4. TYPICAL BASE CABINET WITH DOOR(S), PER DETAIL **xx/A570**
5. TYPICAL BASE CABINET WITH DRAWER(S), PER DETAIL **xx/A570**
6. TYPICAL BASE CABINET WITH DOOR(S) AND DRAWER, PER DTL **xx/A570**
7. TYPICAL BASE CABINET WITH TWO FILE DRAWERS, PER DTL **xx/A570**
8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **xx/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **xx/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **xx/A570**
11. TYPICAL SINK BASE CABINET, PER DETAIL **xx/A570**
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **xx/A571**
13. TYPICAL TALL CABINET W/O DOOR, PER DETAIL **xx/A571**
14. TYPICAL TALL MEDIA CABINET, PER DETAIL **xx/A571**

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
BRENT R. COX
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

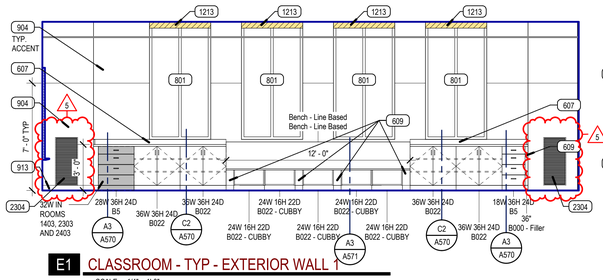
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLANS & INTERIOR ELEVATIONS

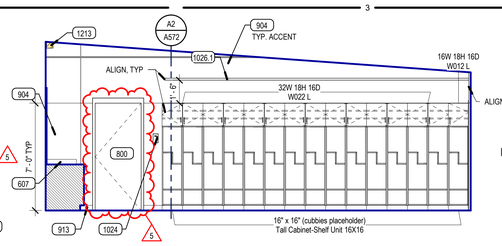
A407

11/8/2023 10:46:17 PM



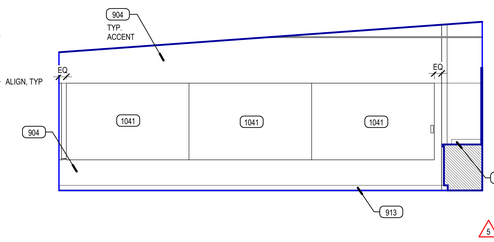
E1 CLASSROOM - TYP - EXTERIOR WALL 1

SCALE: 1/4" = 1'-0"



E2 CLASSROOM - TYP - CUBBIES 1

SCALE: 1/4" = 1'-0"



E4 CLASSROOM - TYP - WHITE BOARD

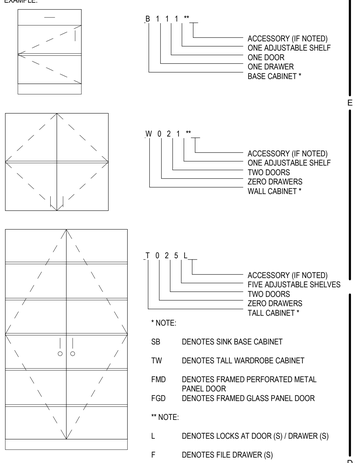
SCALE: 1/4" = 1'-0"

KEYED NOTES

607	PLASTIC LAMINATE COUNTERTOP
609	FILLER PANEL
800	DOOR & FRAME
801	WINDOW SYSTEM
816	14' ALUMINUM SLIDING GLASS DOOR
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
910	15 X 30 PORCELAIN CERAMIC WALL TILE WAINSCOT
913	SCHEDULED BASE
1024	SIGNAGE, SEE SCHEDULE
1026.1	SS MAGNETIC STRIP, 1 1/2
1039	48"X60" WHITE BOARD
1040	72"X60" WHITE BOARD
1041	96"X60" WHITE BOARD
1043	41H x 61W x 1D WALL MOUNTED DISPLAY CABINET
1213	ROLLER WINDOW SHADES
2200	SINK AND FAUCET
2205	DRINKING FOUNTAINS HIGH/LOW, W/ BOTTLE FILLER OVER LOWER FOUNTAIN
2304	RETURN AIR CHASE AND MECHANICAL GRILLE, W/ MTL. STUD FRAMING & GYP. BD. SURROUND, SEE PLANS & INT. ELEVATIONS. PAINT INSIDE OF CHASE WALLS BLACK.
2702.1	WALL MOUNTED TV/MONITOR OWNER PROVIDED CONTRACTOR INSTALLED

ARCHITECTURAL MILLWORK KEY

EXAMPLE:



* NOTE:

SB	DENOTES SINK BASE CABINET
TW	DENOTES TALL WARDROBE CABINET
FMD	DENOTES FRAMED PERFORATED METAL PANEL DOOR
FGD	DENOTES FRAMED GLASS PANEL DOOR

** NOTE:

L	DENOTES LOCKS AT DOOR (S) / DRAWER (S)
F	DENOTES FILE DRAWER (S)

CABINET MEASUREMENTS SHOWN ARE ACTUAL SIZES. BASE CABINET HEIGHTS ALLOW FOR A COUNTERTOP 1 1/2" THICK. CABINET DEPTHS ARE MEASURED FROM THE BACK TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE)

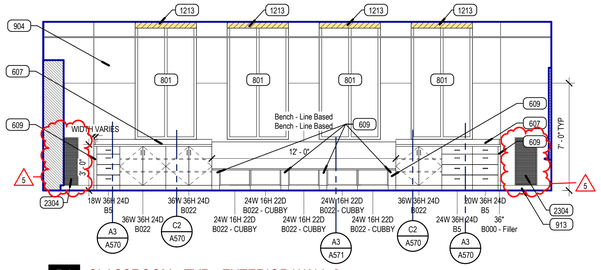
ALL CABINET INTERIORS, WHETHER CONCEALED BEHIND DOORS OR OPEN, ARE STANDARD MELAMINE LAMINATE AS PER SPECIFICATIONS.

MILLWORK LEGEND

1. MILLWORK DIMENSION NUMBERS ARE WIDTH X HEIGHT X DEPTH.
2. ALL MILLWORK DIMENSIONED FROM BASE TO TOP OF IDENTIFIED COUNTERTOP, TYP
3. CABINET DEPTHES ARE MEASURED FROM THE WALL TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE).
4. PROVIDE BASE AT ALL CABINET TOE SPACE, UNLESS NOTED OTHERWISE.
5. PROVIDE GROMMET WHERE "G" IS LABELED ON PLANOS OR ELEVATIONS.
6. ALL COUNTERTOPS TO HAVE A 4" BACKSPLASH, UNLESS NOTED OTHERWISE, TO MATCH COUNTERTOP, ON BACK AND SIDE WALLS.
7. PROVIDE FILLER PANELS TO SEAL SIDES AND TOPS OF ALL CABINETS PLACED AT AN ANGLE TO ADJACENT WALL(S).
8. ALL MILLWORK TO FINISHED ON ENDS, TYP.
9. CONTRACTOR TO PROVIDE BLOCKING BEHIND ALL CABINETS, COAT RACKS, PENCIL SHARPENER BLOCKS, T.V. BRACKETS AND PROJECTION SCREENS AS WELL AS ALL WALL MOUNTED ACCESSORIES, INCLUDING WHITE BOARDS, TACKBOARDS, TOILET AND URINAL PARTITIONS AND TOILET ROOM ACCESSORIES, ETC... NOTE: ONLY 2X WOOD BLOCKING IS ACCESPTABLE BEHIND MILLWORK AND TOILET ROOM PARTITIONS.
10. REFER TO SHEET **A400** FOR FINISH COLORS ON ALL MILLWORK AND CASEWORK

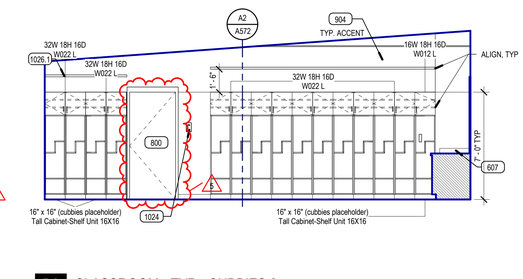
TYPICAL MILLWORK DETAILS

1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **B6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **D3/A570**
3. TYPICAL WALL HUNG RESTROOM MULTI-STATION COUNTER & SINK, PER DETAIL **A4/A571**
4. TYPICAL BASE CABINET WITH DOOR(S), PER DETAIL **C2/A570**
5. TYPICAL BASE CABINET WITH DRAWER(S), PER DETAIL **A3/A570**
6. TYPICAL BASE CABINET WITH DOOR(S) AND DRAWER, PER DTL **C5/A570**
7. TYPICAL BASE CABINET WITH TWO FILE DRAWERS, PER DTL **B1/A570**
8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **C6/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **E1/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **B3/A570**
11. TYPICAL SINK BASE CABINET, PER DETAIL **B4/A570**
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **A2/A570**
13. TYPICAL TALL CABINET WITH OPEN CUBBIES, PER DETAIL **A2/A572**
14. TYPICAL RECEPTION DESK WITH OPEN SPACE, PER DETAIL **A1/A570**
15. TYPICAL BOOKSHELF, PER DETAIL **A5/A570**



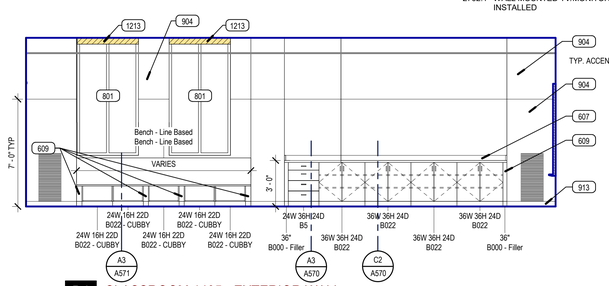
D1 CLASSROOM - TYP - EXTERIOR WALL 2

SCALE: 1/4" = 1'-0"



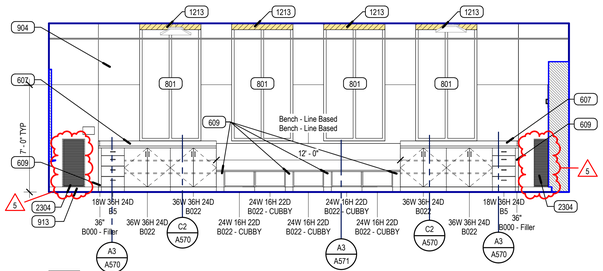
D2 CLASSROOM - TYP - CUBBIES 2

SCALE: 1/4" = 1'-0"



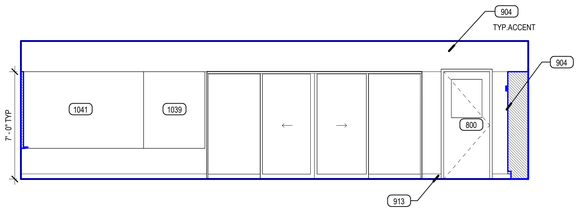
D4 CLASSROOM 1405 - EXTERIOR WALL

SCALE: 1/4" = 1'-0"



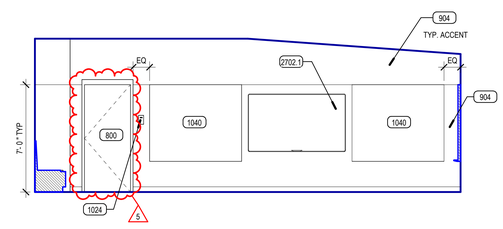
C1 CLASSROOM - TYP - EXTERIOR WALL 3

SCALE: 1/4" = 1'-0"



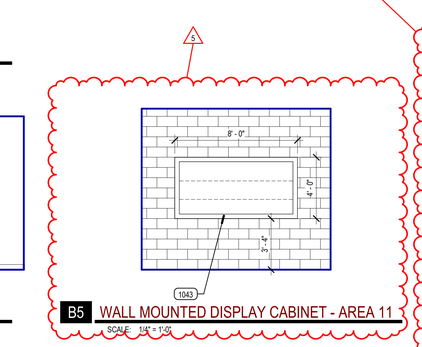
C2 CLASSROOM 1415 - BOTTOM

SCALE: 1/4" = 1'-0"



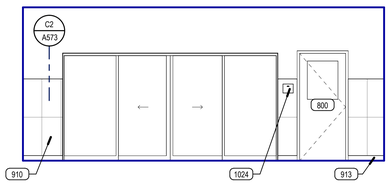
C4 FUNCTIONAL SKILLS - LEFT

SCALE: 1/4" = 1'-0"



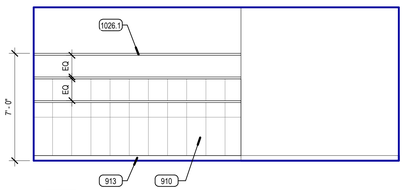
B5 WALL MOUNTED DISPLAY CABINET - AREA 11

SCALE: 1/4" = 1'-0"



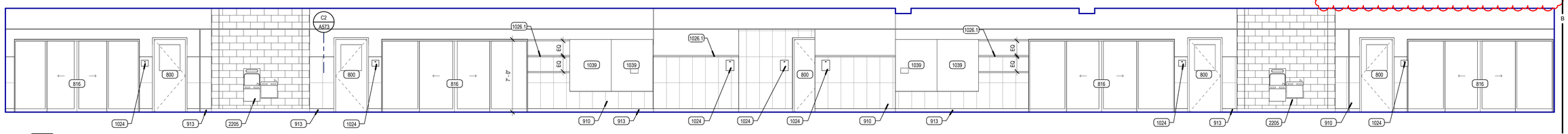
B2 AREA 14 - COLLABORATION - BOTTOM

SCALE: 1/4" = 1'-0"



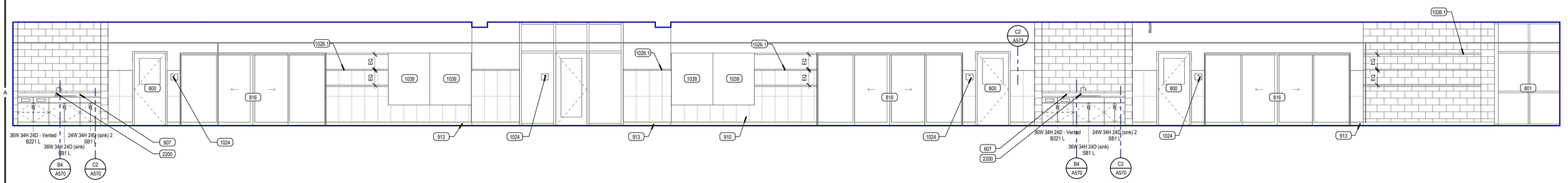
B4 AREA 14 - COLLABORATION - TOP

SCALE: 1/4" = 1'-0"



B1 AREA 14 COLLABORATION - TOP

SCALE: 1/4" = 1'-0"



A1 AREA 14 COLLABORATION - BOTTOM

SCALE: 1/4" = 1'-0"

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CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH
CHRISTOPHER M. GAY
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLANS & INTERIOR ELEVATIONS

A408

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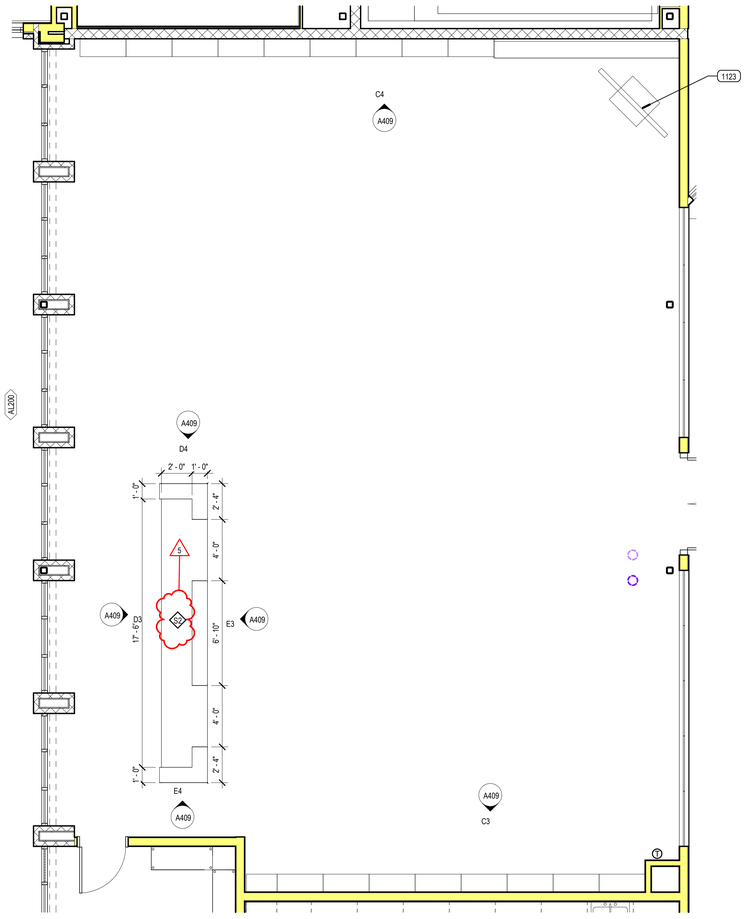
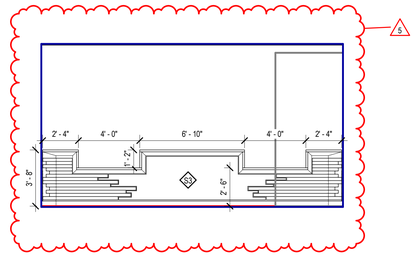


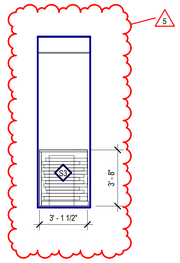
C1 ENLARGED MEDIA CENTER 2322 - PLAN

SCALE: 1/4" = 1'-0"



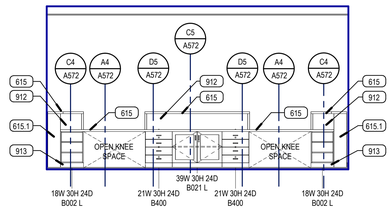
E3 MEDIA CENTER 2322 - DESK - RIGHT

SCALE: 1/4" = 1'-0"



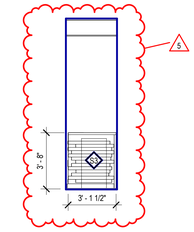
E4 MEDIA CENTER 2322 - DESK - BOTTOM

SCALE: 1/4" = 1'-0"



D3 MEDIA CENTER 2322 - DESK - LEFT

SCALE: 1/4" = 1'-0"



D4 MEDIA CENTER 2322 - DESK - TOP

SCALE: 1/4" = 1'-0"

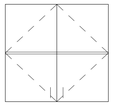
KEYED NOTES

607	PLASTIC LAMINATE COUNTERTOP
611	16" ADJUSTABLE SHELVING, U.N.O.
615	QUARTZ SURFACING MATERIAL COUNTERTOP
615.1	QUARTZ SURFACING MATERIAL END PANEL
800	DOOR & FRAME
801	WINDOW SYSTEM
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
910	15 X 30 PORCELAIN CERAMIC WALL TILE WAINSCOT
911	CERAMIC WALL TILE
912	TACKABLE WALL SURFACE, TO 8'-0" ACCENT COLOR ABOVE
913	SCHEDULED BASE
1004	SOAP DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1010	TOILET PAPER DISPENSER, OWNER FURNISHED, CONTRACTOR INSTALLED
1024	SIGNAGE, SEE SCHEDULE
1030.1	144"x48" WHITE BOARD
1039	48"X60" WHITE BOARD
1123	LCD TV AND MOBILE TV CART, NIC
1210	MOBILE COMPUTER CART, NIC
2200	SINK AND FAUCET
2702.1	WALL MOUNTED TV/MONITOR OWNER PROVIDED CONTRACTOR INSTALLED

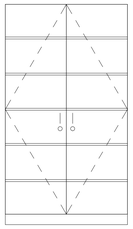
ARCHITECTURAL MILLWORK KEY

EXAMPLE:

B 1 1 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- ONE DOOR
- ONE DRAWER
- BASE CABINET *



W 0 2 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- TWO DOORS
- ZERO DRAWERS
- WALL CABINET *



T 0 2 5 L
- ACCESSORY (IF NOTED)
- FIVE ADJUSTABLE SHELVES
- TWO DOORS
- ZERO DRAWERS
- TALL CABINET *

* NOTE:

SB	DENOTES SINK BASE CABINET
TW	DENOTES TALL WARDROBE CABINET
FMD	DENOTES FRAMED PERFORATED METAL PANEL DOOR
FGD	DENOTES FRAMED GLASS PANEL DOOR

** NOTE:

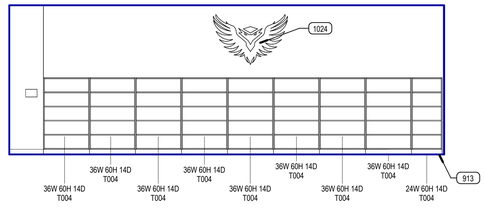
L	DENOTES LOCKS AT DOOR (S) / DRAWER (S)
F	DENOTES FILE DRAWER (S)

CABINET MEASUREMENTS SHOWN ARE ACTUAL SIZES. BASE CABINET HEIGHTS ALLOW FOR A COUNTERTOP 1 1/2" THICK. CABINET DEPTHS ARE MEASURED FROM THE BACK TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE)

ALL CABINET INTERIORS, WHETHER CONCEALED BEHIND DOORS OR OPEN, ARE STANDARD MELAMINE LAMINATE AS PER SPECIFICATIONS.

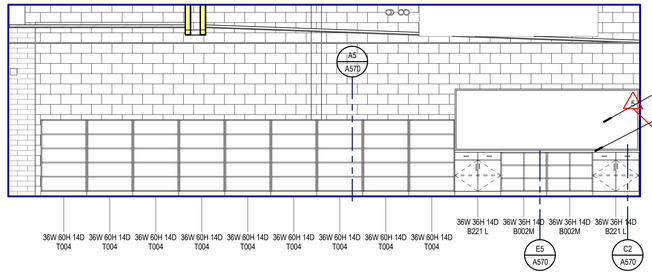
MILLWORK LEGEND

1. MILLWORK DIMENSION NUMBERS ARE WIDTH X HEIGHT X DEPTH.
2. ALL MILLWORK DIMENSIONED FROM BASE TO TOP OF IDENTIFIED COUNTERTOP, TYP
3. CABINET DEPTHES ARE MEASURED FROM THE WALL TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE).
4. PROVIDE BASE AT ALL CABINET TOE SPACE, UNLESS NOTED OTHERWISE.
5. PROVIDE GROMMET WHERE "G" IS LABELED ON PLANOS OR ELEVATIONS.
6. ALL COUNTERTOPS TO HAVE A 4" BACKSPLASH, UNLESS NOTED OTHERWISE, TO MATCH COUNTERTOP, ON BACK AND SIDE WALLS.
7. PROVIDE FILLER PANELS TO SEAL SIDES AND TOPS OF ALL CABINETS PLACED AT AN ANGLE TO ADJACENT WALL(S).
8. ALL MILLWORK TO FINISHED ON ENDS, TYP.
9. CONTRACTOR TO PROVIDE BLOCKING BEHIND ALL CABINETS, COAT RACKS, PENCIL SHARPENER BLOCKS, T.V. BRACKETS AND PROJECTION SCREENS AS WELL AS ALL WALL MOUNTED ACCESSORIES, INCLUDING WHITE BOARDS, TACKBOARDS, TOILET AND URINAL PARTITIONS AND TOILET ROOM ACCESSORIES, ETC... NOTE: ONLY 2X WOOD BLOCKING IS ACCESPTABLE BEHIND MILLWORK AND TOILET ROOM PARTITIONS.
10. REFER TO SHEET **A400** FOR FINISH COLORS ON ALL MILLWORK AND CASEWORK



C3 MEDIA CENTER 2322 - BOTTOM

SCALE: 1/4" = 1'-0"



C4 MEDIA CENTER 2322 - LEARNING AREA - FRONT

SCALE: 1/4" = 1'-0"

TYPICAL MILLWORK DETAILS

1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **B6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **D3/A570**
3. TYPICAL WALL HUNG RESTROOM MULTI-STATION COUNTER & SINK, PER DETAIL **A4/A571**
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8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **C6/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **E1/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **B3/A570**
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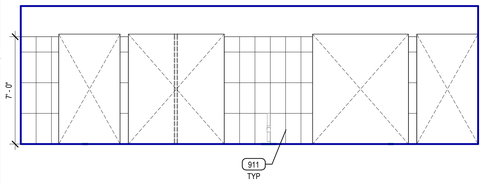
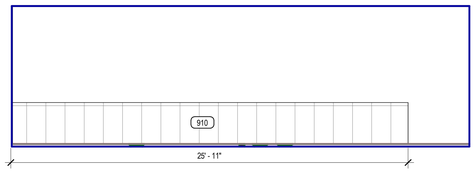
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **A2/A570**
13. TYPICAL TALL CABINET WITH OPEN CUBBIES, PER DETAIL **A2/A572**
14. TYPICAL RECEPTION DESK WITH OPEN SPACE, PER DETAIL **A1/A570**
15. TYPICAL BOOKSHELF, PER DETAIL **A5/A570**



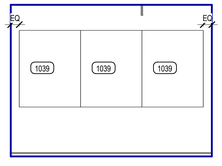
B1 KITCHEN FRONT 1212 - BOTTOM

SCALE: 1/4" = 1'-0"



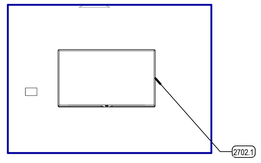
B2 SERVING 1211 - BOTTOM

SCALE: 1/4" = 1'-0"



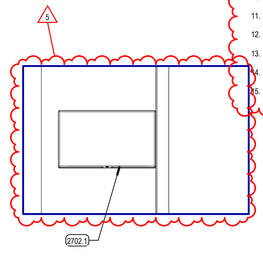
B3 THINK TANK 1307 - BOTTOM

SCALE: 1/4" = 1'-0"



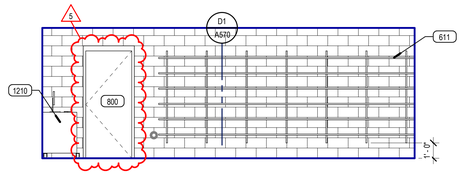
B4 THINK TANK 1307 - TOP

SCALE: 1/4" = 1'-0"



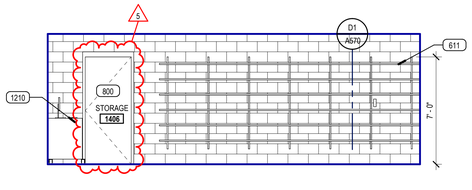
B5 THINK TANK 1325 - TOP

SCALE: 1/4" = 1'-0"



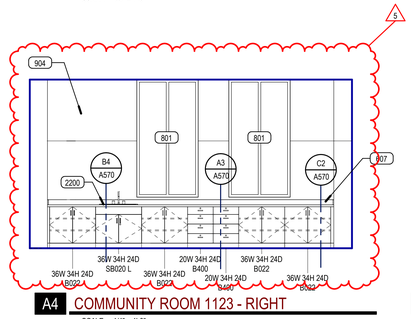
A1 STORAGE - TYP. - LEFT

SCALE: 1/4" = 1'-0"



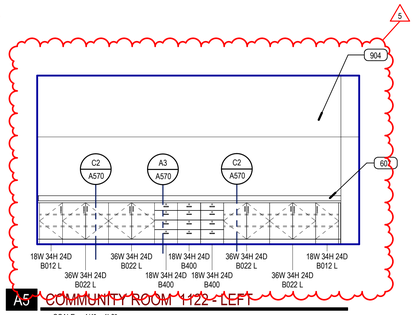
A2 STORAGE - TYP. - RIGHT

SCALE: 1/4" = 1'-0"



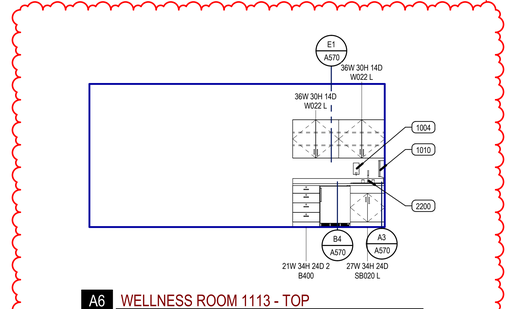
A4 COMMUNITY ROOM 1123 - RIGHT

SCALE: 1/4" = 1'-0"



A5 COMMUNITY ROOM 1122 - LEFT

SCALE: 1/4" = 1'-0"



A6 WELLNESS ROOM 1113 - TOP

SCALE: 1/4" = 1'-0"

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CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — JARED SHELLEY — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

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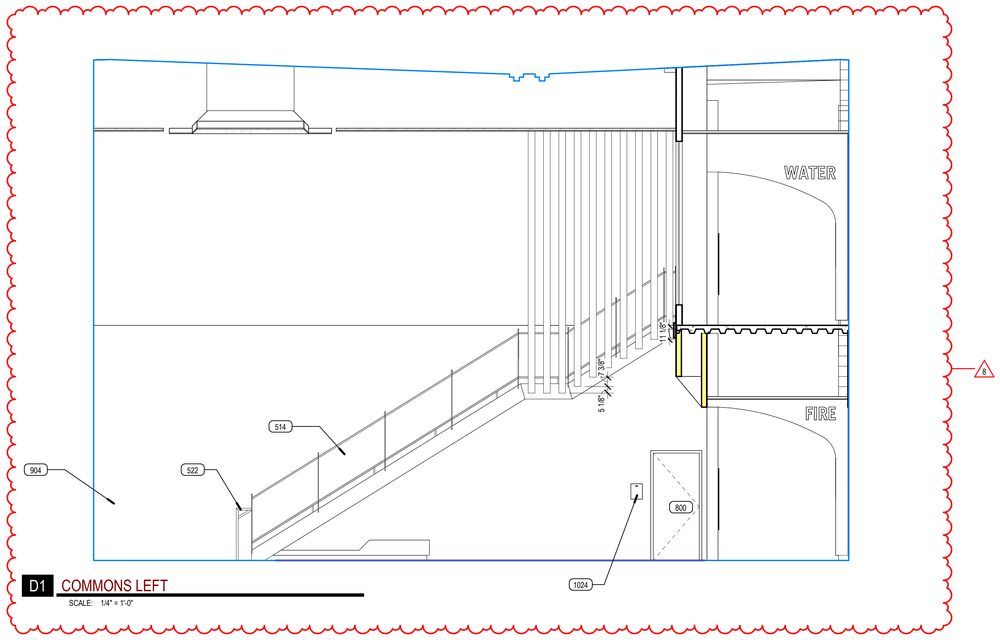
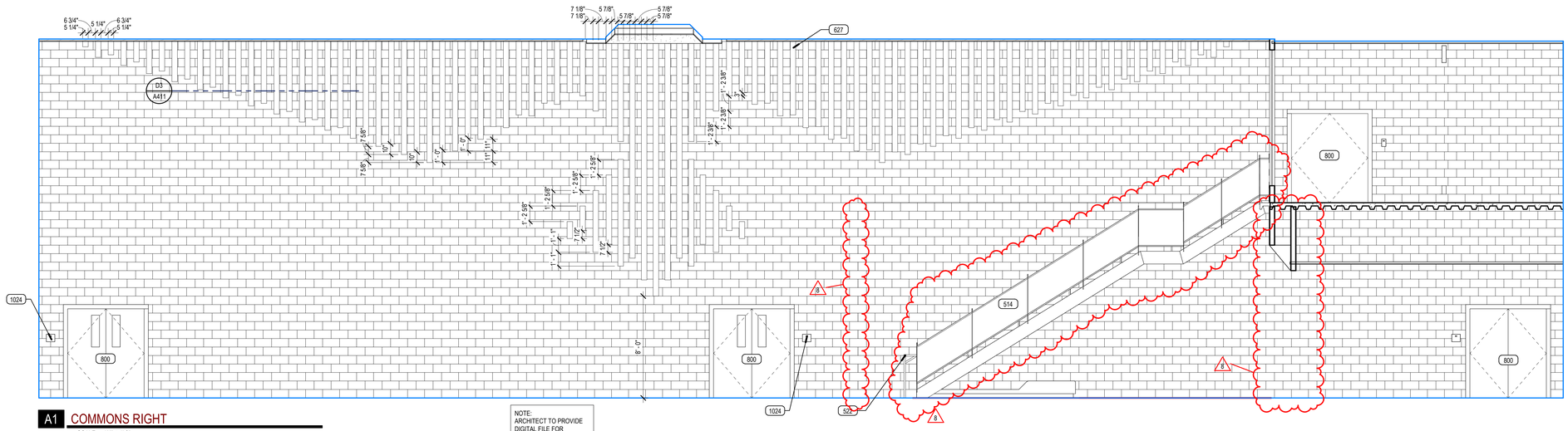


D1 COMMONS LEFT

SCALE: 1/4" = 1'-0"



A1 COMMONS RIGHT

SCALE: 1/4" = 1'-0"

NOTE:
ARCHITECT TO PROVIDE DIGITAL FILE FOR PATTERN LAYOUT. DIMENSIONS SHOWN ON ELEVATION ARE TYP.

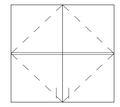
KEYED NOTES

514	RAILING TYPE 1, GLASS HANDRAIL, SEE DETAIL D2/A551
522	RAILING TYPE 4, FREE STANDING HANDRAIL, SEE DETAIL D3/A551
627	WALL MOUNTED 5 1/4" X 3/4" WOOD SLATS, LENGTH TO BE PROVIDED BY ARCHITECT, CSBA
800	DOOR & FRAME
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
1024	SIGNAGE, SEE SCHEDULE

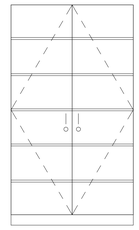
ARCHITECTURAL MILLWORK KEY

EXAMPLE:

B 1 1 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- ONE DOOR
- ONE DRAWER
- BASE CABINET *



W 0 2 1 **
- ACCESSORY (IF NOTED)
- ONE ADJUSTABLE SHELF
- TWO DOORS
- ZERO DRAWERS
- WALL CABINET *



T 0 2 5 L
- ACCESSORY (IF NOTED)
- FIVE ADJUSTABLE SHELVES
- TWO DOORS
- ZERO DRAWERS
- TALL CABINET *

* NOTE:

SB	DENOTES SINK BASE CABINET
TW	DENOTES TALL WARDROBE CABINET
FMD	DENOTES FRAMED PERFORATED METAL PANEL DOOR
FGD	DENOTES FRAMED GLASS PANEL DOOR

** NOTE:

L	DENOTES LOCKS AT DOOR (S) / DRAWER (S)
F	DENOTES FILE DRAWER (S)

CABINET MEASUREMENTS SHOWN ARE ACTUAL SIZES. BASE CABINET HEIGHTS ALLOW FOR A COUNTERTOP 1 1/2" THICK. CABINET DEPTHS ARE MEASURED FROM THE BACK TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE)

ALL CABINET INTERIORS, WHETHER CONCEALED BEHIND DOORS OR OPEN, ARE STANDARD MELAMINE LAMINATE AS PER SPECIFICATIONS.

MILLWORK LEGEND

1. MILLWORK DIMENSION NUMBERS ARE WIDTH X HEIGHT X DEPTH.
2. ALL MILLWORK DIMENSIONED FROM BASE TO TOP OF IDENTIFIED COUNTERTOP, TYP
3. CABINET DEPTHES ARE MEASURED FROM THE WALL TO THE FACE OF THE DOOR OR DRAWER FRONT (WHERE APPLICABLE).
4. PROVIDE BASE AT ALL CABINET TOE SPACE, UNLESS NOTED OTHERWISE.
5. PROVIDE GROMMET WHERE "G" IS LABELED ON PLANOS OR ELEVATIONS.
6. ALL COUNTERTOPS TO HAVE A 4" BACKSPLASH, UNLESS NOTED OTHERWISE, TO MATCH COUNTERTOP, ON BACK AND SIDE WALLS.
7. PROVIDE FILLER PANELS TO SEAL SIDES AND TOPS OF ALL CABINETS PLACED AT AN ANGLE TO ADJACENT WALL(S).
8. ALL MILLWORK TO FINISHED ON ENDS, TYP.
9. CONTRACTOR TO PROVIDE BLOCKING BEHIND ALL CABINETS, COAT RACKS, PENCIL SHARPENER BLOCKS, T.V. BRACKETS AND PROJECTION SCREENS AS WELL AS ALL WALL MOUNTED ACCESSORIES, INCLUDING WHITE BOARDS, TACKBOARDS, TOILET AND URINAL PARTITIONS AND TOILET ROOM ACCESSORIES, ETC... NOTE: ONLY 2X WOOD BLOCKING IS ACCESPTABLE BEHIND MILLWORK AND TOILET ROOM PARTITIONS.
10. REFER TO SHEET **A400** FOR FINISH COLORS ON ALL MILLWORK AND CASEWORK.

TYPICAL MILLWORK DETAILS

1. TYPICAL MILLWORK ANCHORING DETAILS, PER DETAIL **B6/A570**
2. TYPICAL COUNTERTOP WORK SURFACE, PER DETAIL **D3/A570**
3. TYPICAL WALL HUNG RESTROOM MULTI-STATION COUNTER & SINK, PER DETAIL **A4/A571**
4. TYPICAL BASE CABINET WITH DOOR(S), PER DETAIL **C2/A570**
5. TYPICAL BASE CABINET WITH DRAWER(S), PER DETAIL **A3/A570**
6. TYPICAL BASE CABINET WITH DOOR(S) AND DRAWER, PER DTL **C5/A570**
7. TYPICAL BASE CABINET WITH TWO FILE DRAWERS, PER DTL **B1/A570**
8. TYPICAL PLAN VIEW BASE CABINETS, PER DETAILS **C6/A570**
9. TYPICAL UPPER CABINET WITH DOORS, PER DETAIL **E1/A570**
10. TYPICAL UPPER CABINET W/O DOORS, PER DETAIL **B3/A570**
11. TYPICAL SINK BASE CABINET, PER DETAIL **B4/A570**
12. TYPICAL TALL CABINET WITH DOOR(S), PER DETAIL **A2/A570**
13. TYPICAL TALL CABINET WITH OPEN CUBBIES, PER DETAIL **A2/A572**
14. TYPICAL RECEPTION DESK WITH OPEN SPACE, PER DETAIL **A1/A570**
15. TYPICAL BOOKSHELF, PER DETAIL **A5/A570**

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: DECEMBER 08, 2023

STATE OF UTAH · REGISTERED · 7067969 · LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

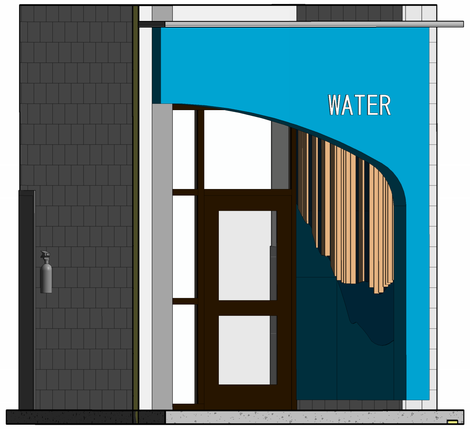
INTERIOR ELEVATIONS

A410

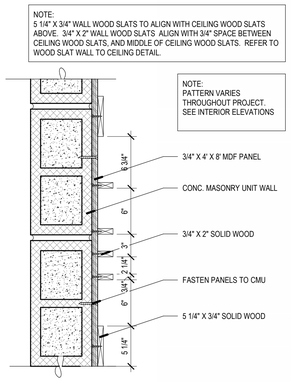
12/4/2023 3:26:21 PM

KEYED NOTES

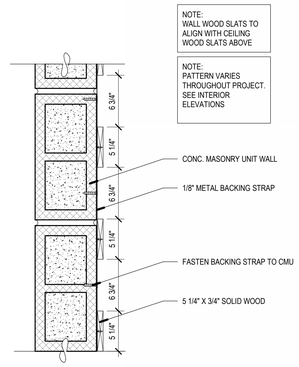
532	16 GAGE BEND STEEL PLATE, POWDER COATED ACCENT COOR
626	WALL MOUNTED 3/4" X 2" WOOD SLATS, LENGTH TO BE PROVIDED BY ARCHITECT, CSBA
627	WALL MOUNTED 5 1/4" X 3/4" WOOD SLATS, LENGTH TO BE PROVIDED BY ARCHITECT, CSBA
913	SCHEDULED BASE
917	MDF WALL PANEL, PAINTED
1024	SIGNAGE, SEE SCHEDULE



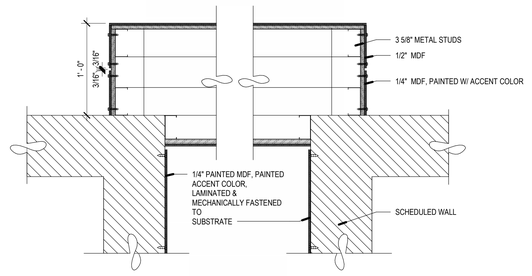
D1 WATER PORTAL ISOMETRIC
SCALE:



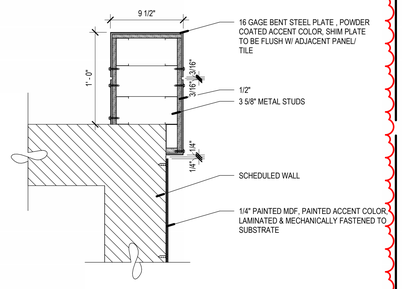
D2 ALTERNATING WOOD SLAT WALL DETAIL - CMU
SCALE: 1 1/2" = 1'-0"



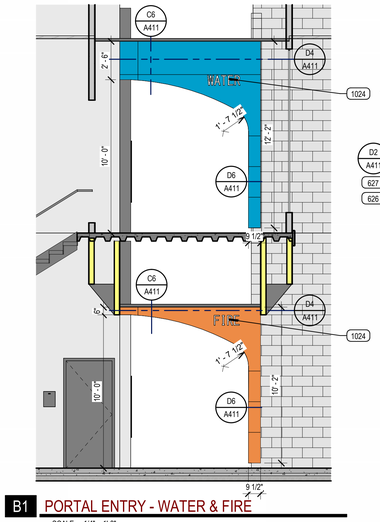
D3 TYP. WOOD SLAT WALL DETAIL - CMU
SCALE: 1 1/2" = 1'-0"



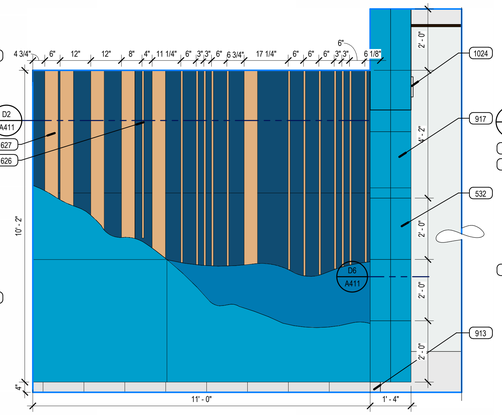
D4 UPPER PORTAL FRAMING CONDITION
SCALE: 1 1/2" = 1'-0"



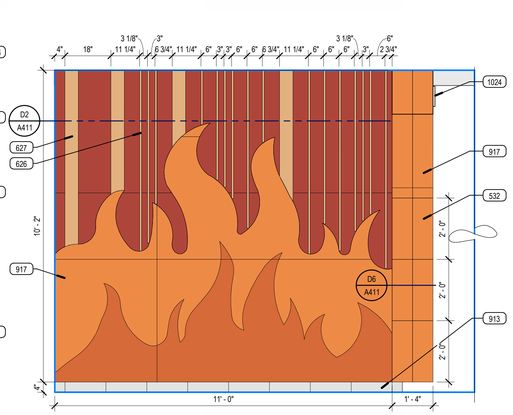
D6 BOTTOM PORTAL FRAMING CONDITION
SCALE: 1 1/2" = 1'-0"



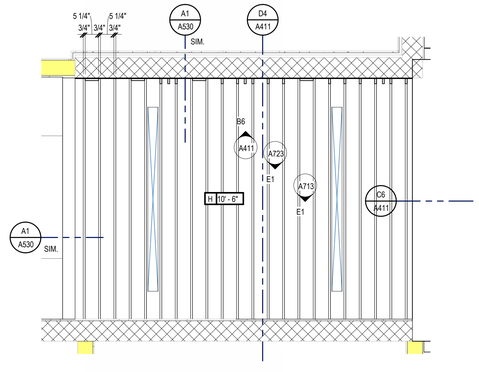
B1 PORTAL ENTRY - WATER & FIRE
SCALE: 1/4" = 1'-0"



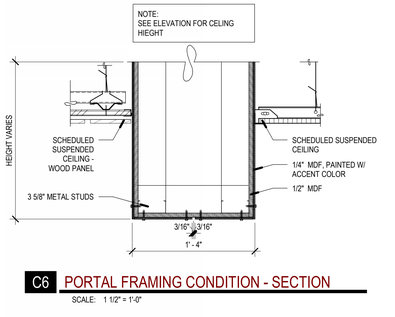
B2 MAIN CORRIDOR - WATER PORTAL
SCALE: 1/2" = 1'-0"



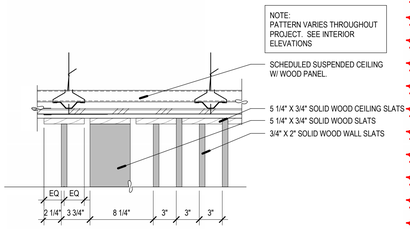
B3 MAIN CORRIDOR - FIRE PORTAL
SCALE: 1/2" = 1'-0"



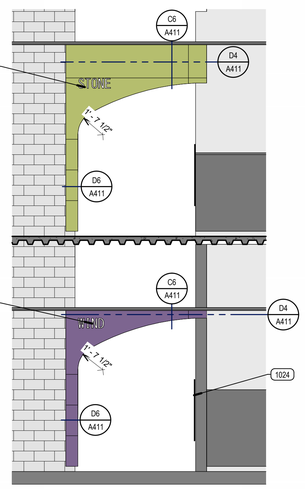
B4 TYP. ENLARGED PORTAL ENTRY RCP
SCALE: 1/2" = 1'-0"



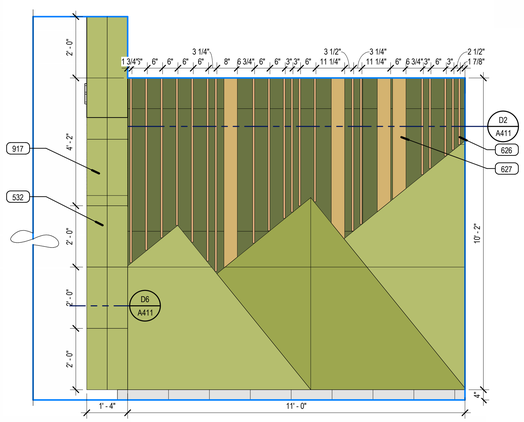
C6 PORTAL FRAMING CONDITION - SECTION
SCALE: 1 1/2" = 1'-0"



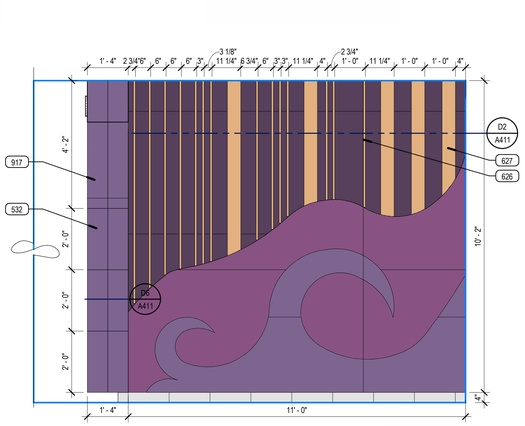
B6 WOOD SLAT WALL TO CEILING DETAIL
SCALE: 1 1/2" = 1'-0"



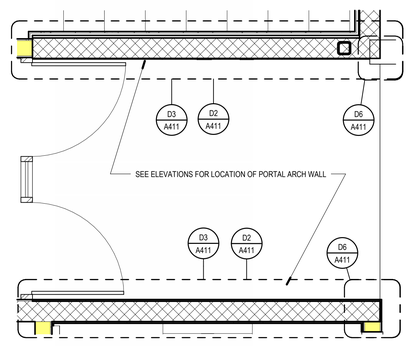
A1 PORTAL ENTRY - STONE & WIND
SCALE: 1/4" = 1'-0"



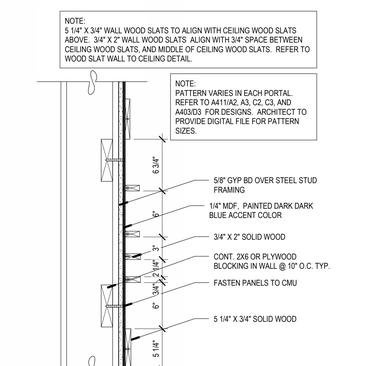
A2 Elevation 23 - c
SCALE: 1/2" = 1'-0"



A3 Elevation 21 - c
SCALE: 1/2" = 1'-0"



A4 TYP. ENLARGED PORTAL ENTRY
SCALE: 1/2" = 1'-0"



A6 ALTERNATING WOOD SLAT WALL DETAIL - STUD WALL
SCALE: 1 1/2" = 1'-0"

OSD HILLCREST ELEMENTARY REBUILD

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BID PACKAGE 5 - GENERAL CONSTRUCTION

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CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

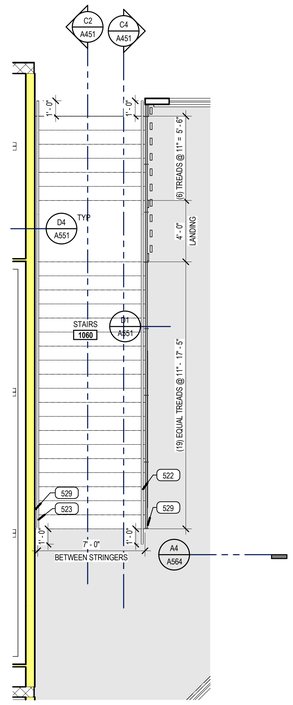
TYPICAL PORTAL ENTRY PLANS, ELEVATIONS, & DETAILS

A411

11/17/2023 12:37:06 PM

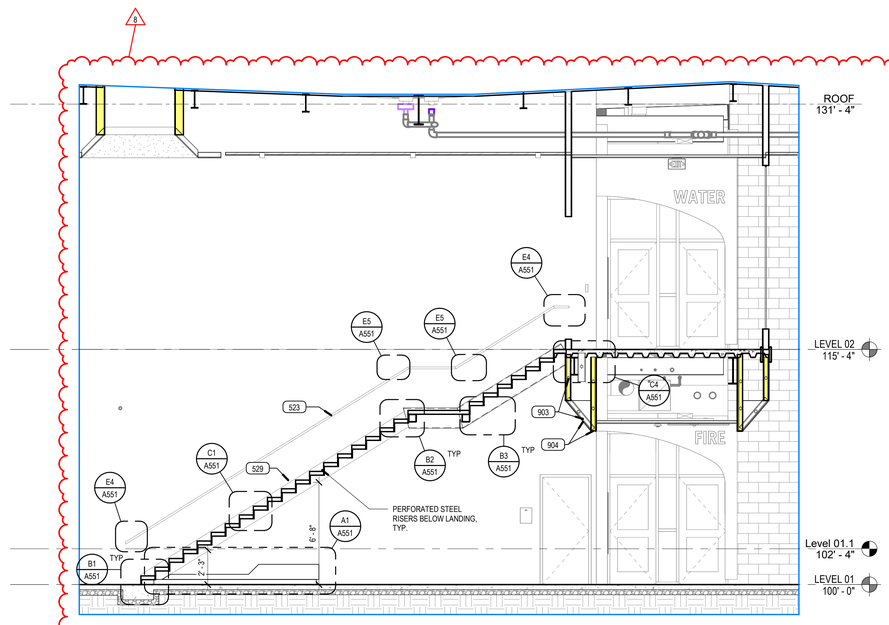
KEYED NOTES

314	CONCRETE BENCH, STAINED
520	RAILING TYPE 1, GLASS GUARDRAIL, SEE DETAIL D1/A551
522	RAILING TYPE 4, FREE STANDING HANDRAIL, SEE DETAIL D3/A551
523	RAILING TYPE 5, TYP. WALL MOUNTED HANDRAIL, SEE DETAIL D4/A551
529	2"X12" TUBE STEEL STRINGER
622	WOOD SLAT RAILING, SEE VERTICAL CIRCULATION DETAILS
805	GLAZING
903	3-5/8" METAL STUD FRAMING
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED



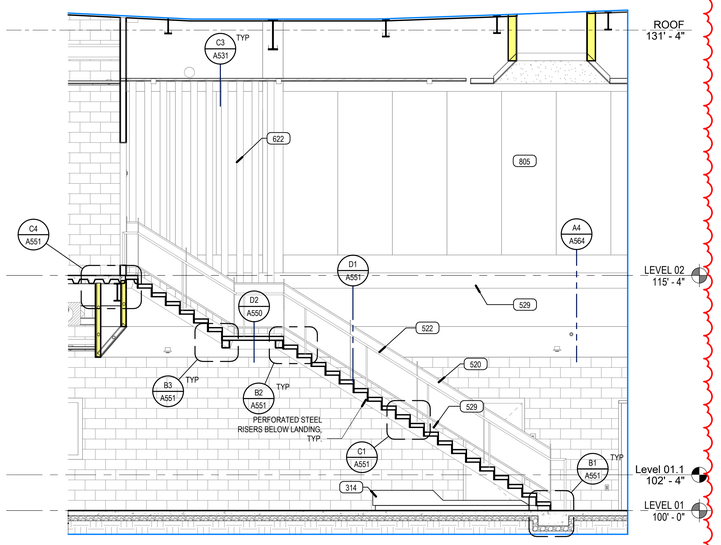
C1 MAIN CORRIDOR - NORTH STAIR

SCALE: 1/4" = 1'-0"



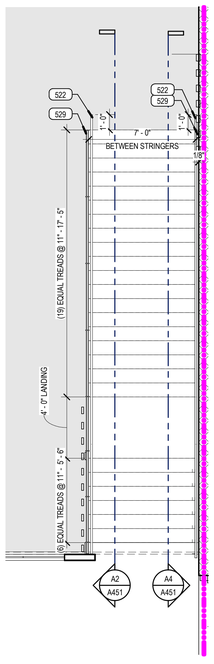
C2 MAIN CORRIDOR STAIR - NORTH - SECTION1

SCALE: 1/4" = 1'-0"



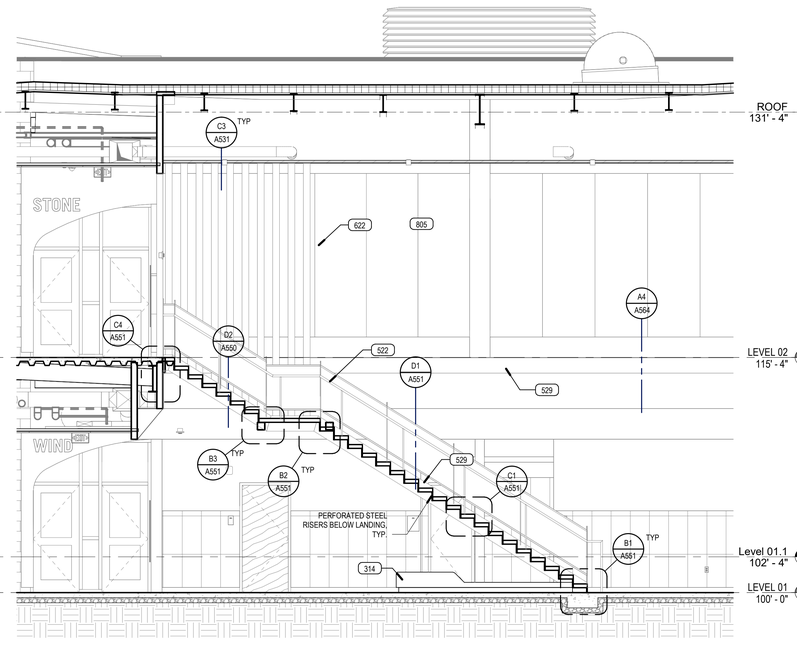
C4 MAIN CORRIDOR STAIR - NORTH - SECTION 2

SCALE: 1/4" = 1'-0"



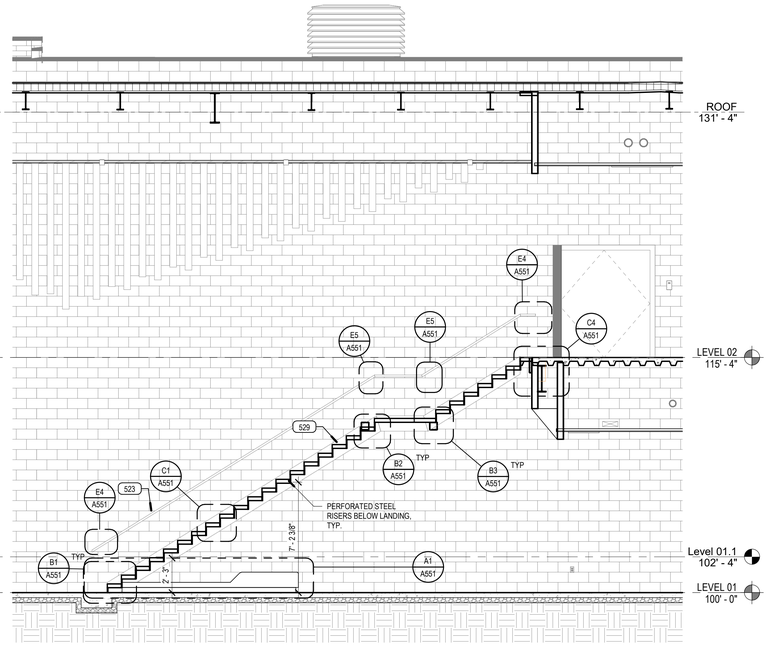
A1 MAIN CORRIDOR - SOUTH STAIR

SCALE: 1/4" = 1'-0"



A2 MAIN CORRIDOR STAIR - SOUTH - SECTION 1

SCALE: 1/4" = 1'-0"



A4 MAIN CORRIDOR STAIR - SOUTH SECTION 2

SCALE: 1/4" = 1'-0"

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DATE: DECEMBER 08, 2023

STATE OF UTAH — DAVID SHEARMAN — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

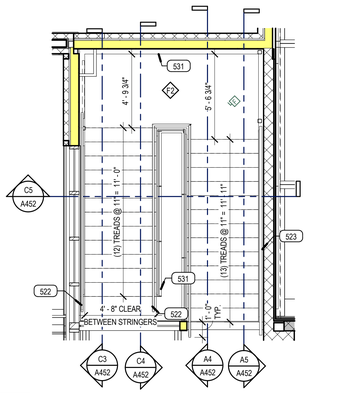
ENLARGED VERTICAL CIRCULATION

A451

12/4/2023 3:26:42 PM

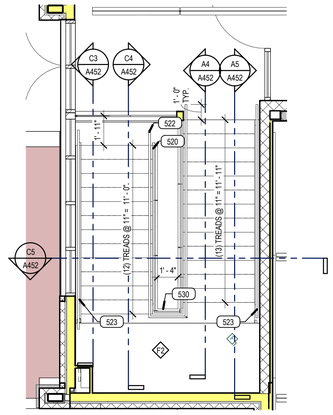
KEYED NOTES

302	REINFORCED CONCRETE SLAB
308	CONCRETE SLAB ON METAL DECK, PAINT DECK WHERE EXPOSED
400	8"X8"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
400.1	8"X8"X16" STANDARD CMU, PAINTED, TOOLED HEAD & BED JOINTS
500	STEEL TUBE PAINTED WHERE EXPOSED
501	STEEL BEAM PAINTED WHERE EXPOSED
503	STEEL DECK PAINTED WHERE EXPOSED
520	RAILING TYPE 1, GLASS GUARDRAIL, SEE DETAIL D1/A551
522	RAILING TYPE 4, FREE STANDING HANDRAIL, SEE DETAIL D3/A551
523	RAILING TYPE 5, TYP. WALL MOUNTED HANDRAIL, SEE DETAIL D4/A551
530	4"x12" TUBE STEEL STRINGER
531	RAILING TYPE 7, FLOOR MOUNTED HANDRAIL, SEE DETAIL D6/ A550
702	WATERPROOFING
704	UNDER SLAB VAPOR BARRIER
705.1	3" RIGID BD. INSUL. CONT. AT FOUNDATION WALL
707	R-35 ROOF RIGID INSULATION BOARD SYSTEM
708	WHITE SINGLE PLY MEMBRANE ROOFING SYSTEM
801	WINDOW SYSTEM
903	3-5/8" METAL STUD FRAMING
904	5/8" TYPE 'X' GYP. BD. PAINTED WHERE EXPOSED
906	6" METAL STUD FRAMING
907	SUSPENDED ACOUSTICAL TILE CEILING
909	SUSPENDED GYP. BD. CEILING SYSTEM



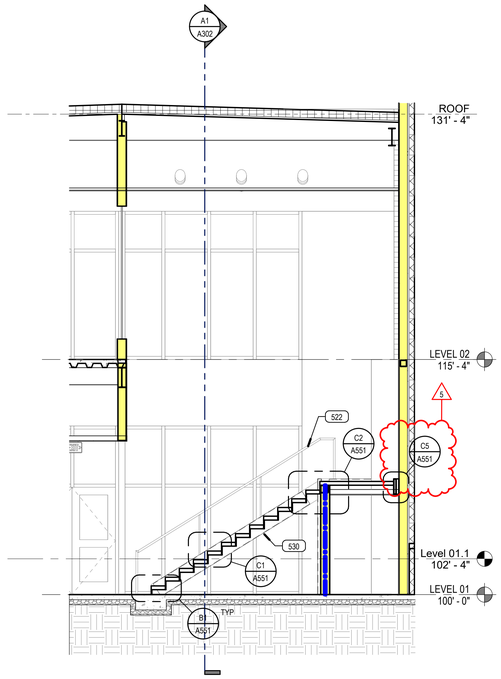
C1 STAIRS 1326

SCALE: 1/4" = 1'-0"



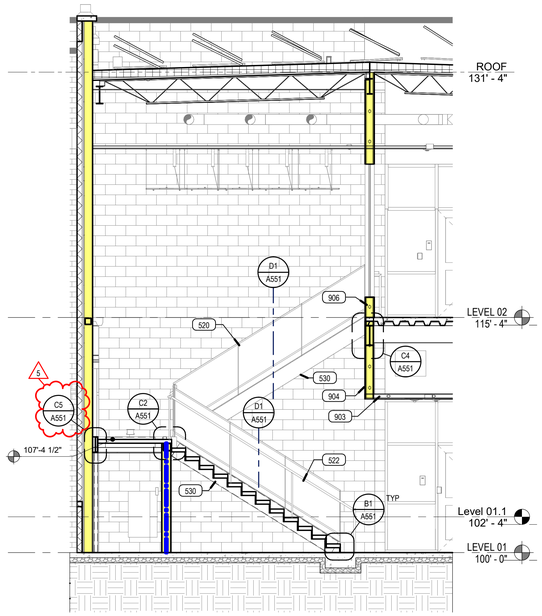
C2 STAIRS 1419

SCALE: 1/4" = 1'-0"



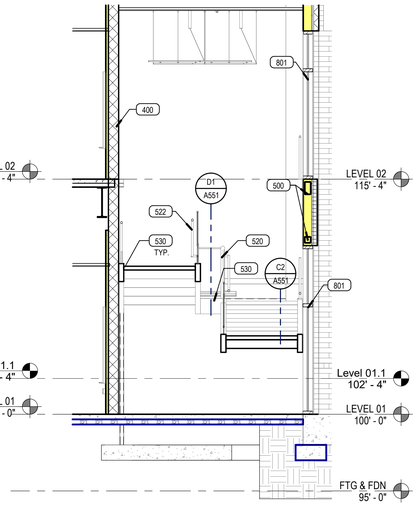
C3 STAIRWELL SECTION 1

SCALE: 1/4" = 1'-0"



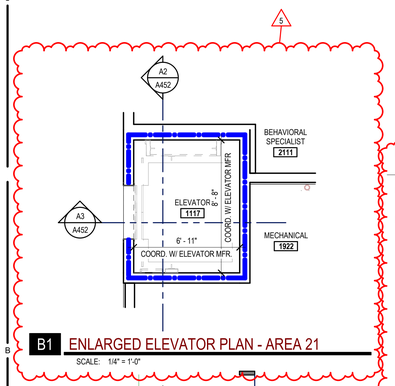
C4 STAIRWELL SECTION 3

SCALE: 1/4" = 1'-0"



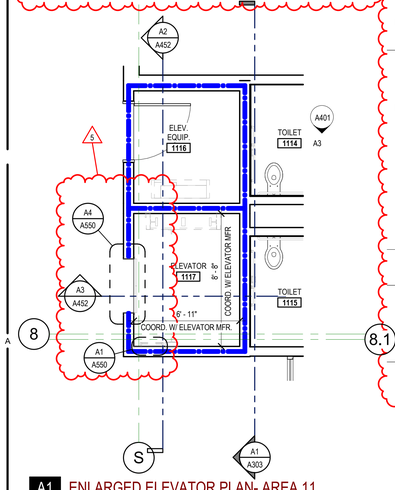
C5 Section 128

SCALE: 1/4" = 1'-0"



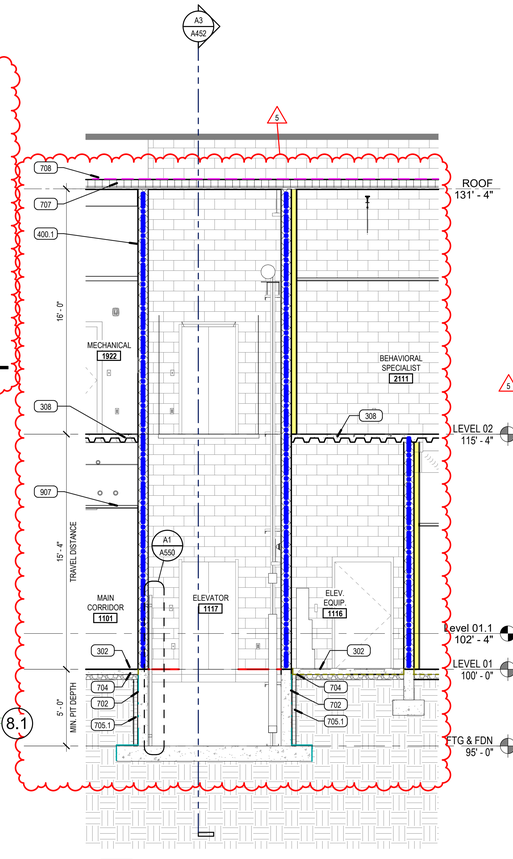
B1 ENLARGED ELEVATOR PLAN - AREA 21

SCALE: 1/4" = 1'-0"



A1 ENLARGED ELEVATOR PLAN- AREA 11

SCALE: 1/4" = 1'-0"



A2 E-1 SECTION 1

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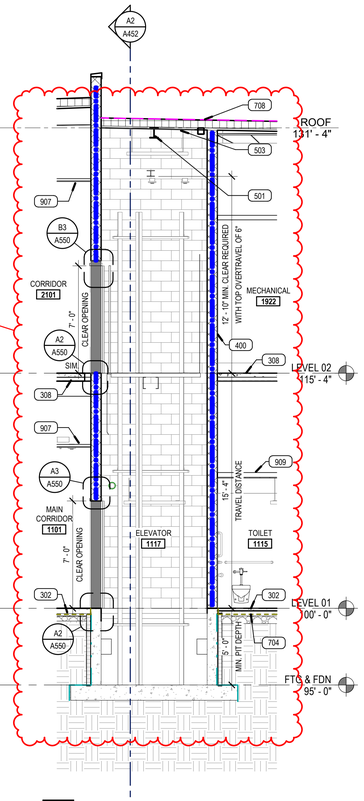

A3 E-1 SECTION

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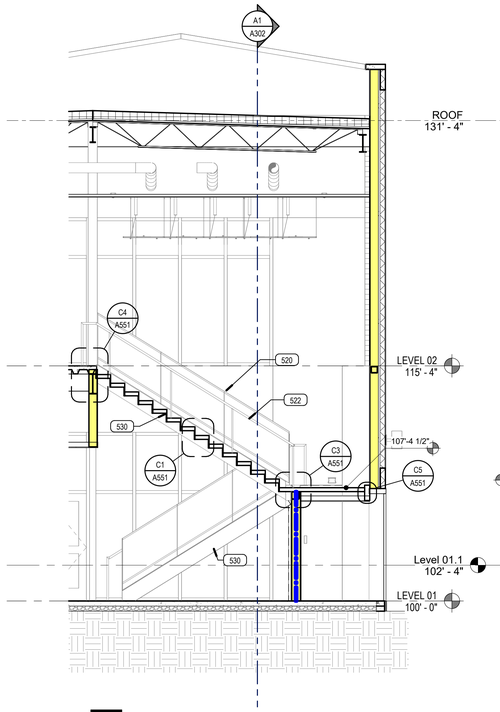
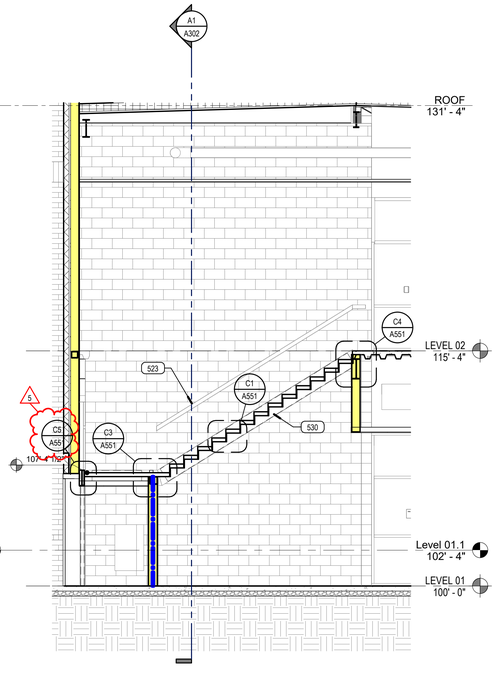


A4 STAIRWELL SECTION 4

SCALE: 1/4" = 1'-0"



A5 STAIRWELL SECTION 2

SCALE: 1/4" = 1'-0"

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CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — JAMES D. SWENSEN — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED VERTICAL CIRCULATION

A452

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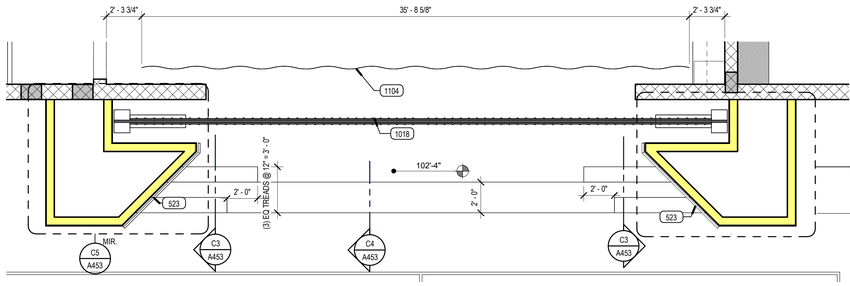
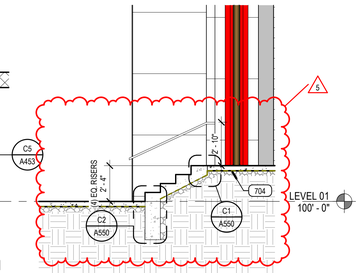
KEYED NOTES

302	REINFORCED CONCRETE SLAB
309	ARCHITECTURAL GRADE FINISH CONCRETE WALL, SEALED
400.1	8"X8"X16" STANDARD CMU, PAINTED, TOOLED HEAD & BED JOINTS
401	10"X8"16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
404	10"X4"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
521	RAILING TYPE 2, GLASS GUARDRAIL, SEE DETAIL D2/A551
523	RAILING TYPE 5, TYP. WALL MOUNTED HANDRAIL, SEE DETAIL D4/A551
704	UNDER SLAB VAPOR BARRIER
911	CERAMIC WALL TILE
913	SCHEDULED BASE
1018	ACCORDION FOLDING PARTITION
1104	SPLIT FRONT CURTAIN WITH HEAVY DUTY TRACK
3100	ENGINEERED FILL
3101	FREE DRAINING GRAVEL BASE



C1 STAIR - @ PLATFORM

SCALE: 1/4" = 1'-0"



C3 PLATFORM - STAIR SECTION

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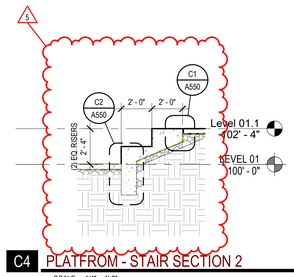

C4 PLATFROM - STAIR SECTION 2

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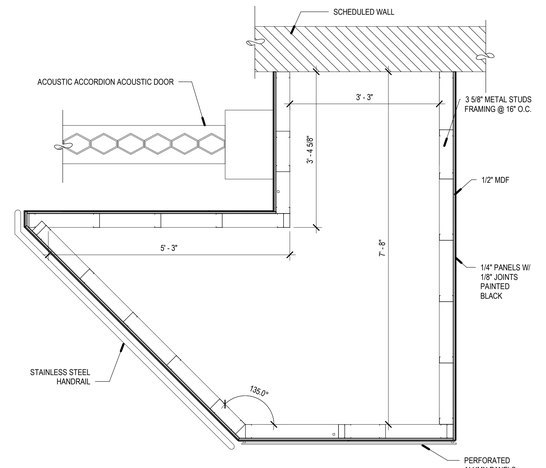
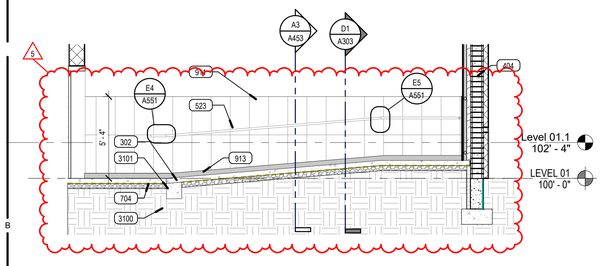


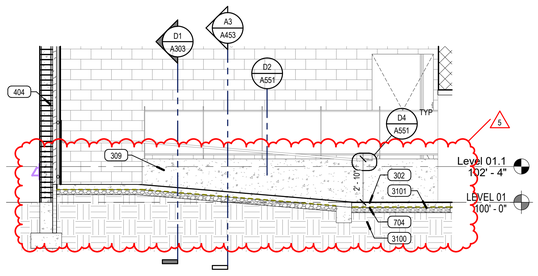
C5 PROSCENIUM JAMB DETAIL

SCALE: 3/4" = 1'-0"



B1 RAMP 1201 - SECTION 1

SCALE: 1/4" = 1'-0"



B3 RAMP 1201 - SECTION 2

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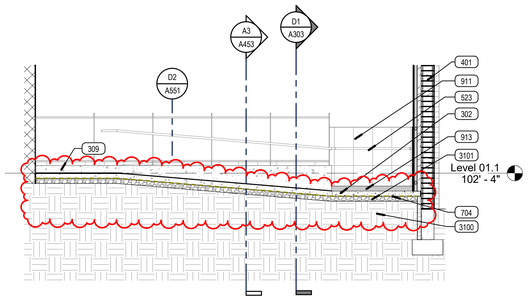
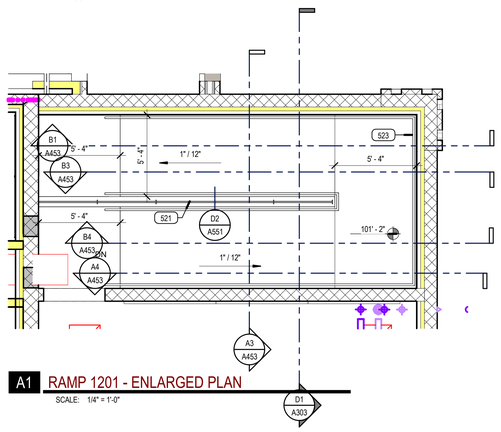


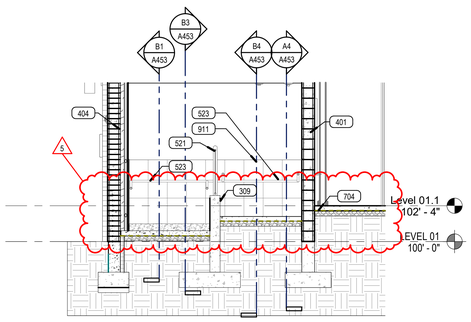
B4 RAMP 1201 - SECTION 3

SCALE: 1/4" = 1'-0"



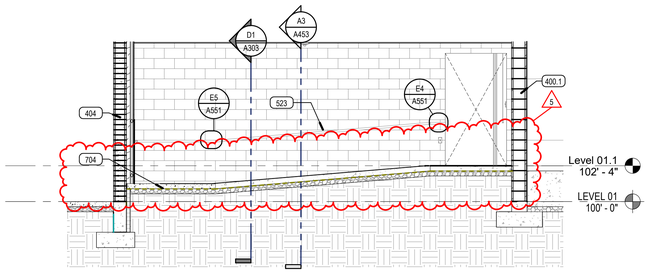
A1 RAMP 1201 - ENLARGED PLAN

SCALE: 1/4" = 1'-0"



A3 RAMP 1201- SECTION 5

SCALE: 1/4" = 1'-0"



A4 RAMP 1201 - SECTION 4

SCALE: 1/4" = 1'-0"

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A453

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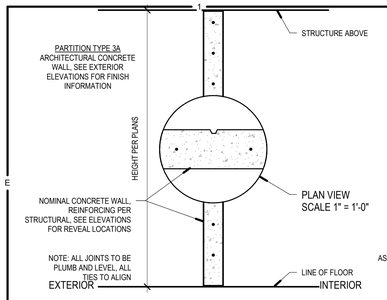
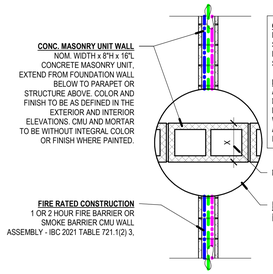
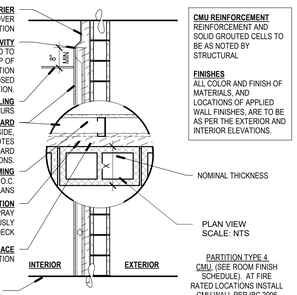
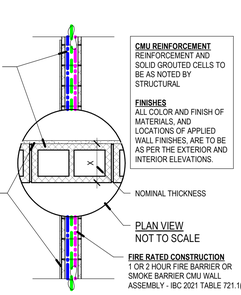
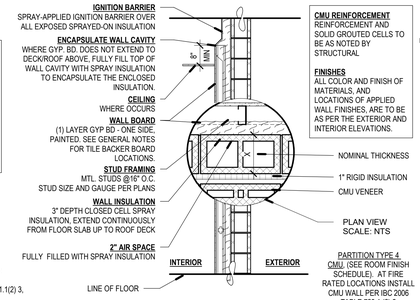




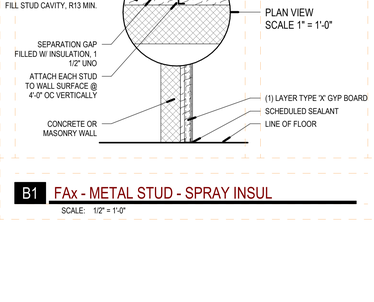






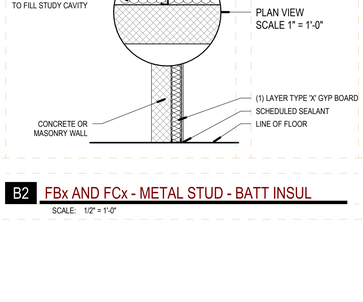
E1 3Ax - CONCRETE WALL

SCALE: 1/2" = 1'-0"



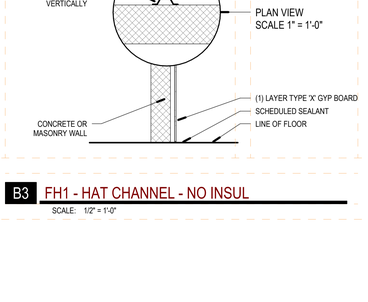
E2 4Ax- MASONRY WALL

SCALE: 1/2" = 1'-0"



E3 4Bx, MASONRY WALL

SCALE: 1/2" = 1'-0"

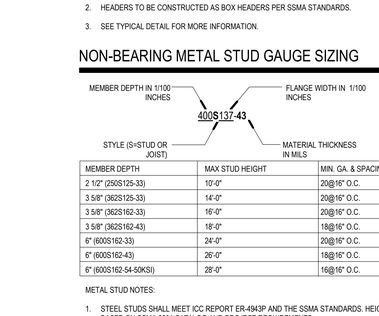


E4 4Cx- MASONRY WALL

SCALE: 1/2" = 1'-0"

E5 4Dx, MASONRY WALL

SCALE: 1/2" = 1'-0"



D1 5Ax EXTERIOR STUD WALL WITH CLADDING

SCALE: 1/2" = 1'-0"

D2 5Bx EXTERIOR STUD WALL WITH CLADDING

SCALE: 1/2" = 1'-0"

D3 5Cx EXTERIOR STUD WALL WITH CLADDING

SCALE: 1/2" = 1'-0"

D4 5Dx EXTERIOR STUD WALL WITH CLADDING

SCALE: 1/2" = 1'-0"

D5 5Ex EXTERIOR STUD WALL WITH METAL PANEL

SCALE: 1/2" = 1'-0"

KEY FOR PARTITION TYPES

DENOTES TYPE OF CONSTRUCTION (SPEC. DIVISION)

- WALL
  - 3X 0 SERIES CONCRETE
  - 4X 0 SERIES MASONRY
  - 5X 0 SERIES COLD FORMED METAL STUDS, 16 GA MIN.
  - 9X 0 SERIES METAL STUDS
    - NOMINAL SIZES: V = VARIABLE/MATCHEXISTING
      - 1 = 1 5/8" STUDS
      - 2 = 2 1/2" STUDS
      - 3 = 3 5/8" STUDS
      - 4 = 4" STUDS / 4" (NOM.) C.M.U.
      - 6 = 6" STUDS / 6" (NOM.) C.M.U.
      - 8 = 8" STUDS / 8" (NOM.) C.M.U.
      - 10 = 10" (NOM.) C.M.U. OR CONC.
      - 12 = 12" (NOM.) C.M.U. OR CONC.

EXAMPLE: WALL TYPE 9A3 IS A 3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD ON BOTH SIDES.

NOTE: SEE GENERAL NOTES BELOW FOR ADDITIONAL ELEMENTS IN THE INDIVIDUAL WALL TYPES AND SPECIFIC DETAILS, INCLUDING UL RATINGS.

RATED WALL LEGEND

- INCIDENTAL USE AREAS
- 1 HOUR SEPARATION
- 2 HOUR SEPARATION
- 3 HOUR SEPARATION

EXAMPLE: WALL TYPE 9A3-1 IS A ONE HOUR RATED, 3 5/8" METAL STUD WALL WITH 5/8" GYPSUM BOARD ON BOTH SIDES, PER ASSEMBLY REQUIREMENTS.

90X-R SERIES

- FIRE RATING (ONLY WHEN NOTED): 1 = 1 HOUR RATED ASSEMBLY; 2 = 2 HOUR RATED ASSEMBLY; 3 = 3 HOUR RATED ASSEMBLY

NON-BEARING METAL HEADER SCHEDULE

MAXIMUM SPAN	HEADER	FY
4'-0"	(2) 400S137-43	33 ksi
6'-0"	(2) 600S162-43	33 ksi
8'-0"	(2) 800S162-43	33 ksi

METAL STUD HEADER NOTES:

1. SCHEDULE TO BE USED FOR NON-BEARING WALLS.
2. HEADERS TO BE CONSTRUCTED AS BOX HEADERS PER SSMA STANDARDS.
3. SEE TYPICAL DETAIL FOR MORE INFORMATION.

NON-BEARING METAL STUD GAUGE SIZING

MEMBER DEPTH	MAX STUD HEIGHT	MIN. GA. & SPACING
2 1/2" (250S125-33)	10'-0"	20@16" O.C.
3 5/8" (362S125-33)	14'-0"	20@16" O.C.
3 5/8" (362S162-33)	16'-0"	20@16" O.C.
3 5/8" (362S162-43)	18'-0"	18@16" O.C.
6" (600S162-33)	24'-0"	20@16" O.C.
6" (600S162-43)	26'-0"	18@16" O.C.
6" (600S162-54-50KSI)	28'-0"	16@16" O.C.

METAL STUD NOTES:

1. STEEL STUDS SHALL MEET ICC REPORT ER-4943P AND THE SSMA STANDARDS. HEIGHT BASED ON SSMA 2001 CATALOG AND PROJECT REQUIREMENTS.
2. SEE SCHEDULE FOR STUD SPACING AND GAUGE. ALL STUDS AND BRACES SHALL BE 33 KSI UNLESS NOTED OTHERWISE IN THESE DRAWINGS.
3. AT ALL DOORS PROVIDE TWO TABBED 18 GAUGE STUDS AT BOTH SIDES OF JAMB.

PARTITION + FRAMING GENERAL NOTES

FRAMED WALL PARTITIONS

1. PARTITION TYPE INDICATIONS ARE INDEPENDENT OF APPLIED FINISHES. SEE FINISH SHEETS AND INTERIOR ELEVATIONS FOR WALL FINISHES INCLUDING TILE COURSING AND LAYOUT AND/OR THE DESIGNATIONS ON THE PLANS FOR ADDITIONAL INFORMATION REGARDING APPLIED FINISHES.
2. WHERE PARTITION TYPE DESIGNATION ON FLOOR PLANS IS INTERRUPTED BY DOOR OPENING, GLAZED PARTITION, ETC., CONSTRUCTION ABOVE INTERRUPTION (AND WHERE APPLICABLE BELOW) IS TO BE THE SAME AS THAT DESIGNATED FOR THE PARTITION IN WHICH THE INTERRUPTION OCCURRED.
3. THE MINIMUM REQUIREMENTS FOR CONSTRUCTION OF EACH PARTITION TYPE AS EXPRESSED BY THE INDICATED REFERENCE ARE INCORPORATED BY REFERENCE AND ARE APPLICABLE TO THE WORK OF THIS PROJECT. HOWEVER, ADDITIONAL AND/OR MORE RESTRICTIVE REQUIREMENTS MAY BE INDICATED BY THE SPECIFICATIONS AND DRAWINGS. SUCH REQUIREMENTS ALSO APPLY AND SHALL GOVERN. SUCH REQUIREMENTS INCLUDE BUT ARE NOT LIMITED TO:
   a. USE 5/8" THICK GYPSUM BOARD THROUGHOUT UNLESS NOTED OTHERWISE.
   b. USE 16" OC MAX STUD SPACING UNLESS NOTED OTHERWISE IN THESE DOCUMENTS. THE SPACING STATED BY THE REFERENCED APPROVAL OR EST REPORT IS THE MAX SPACING IF ALLOWED IN THESE DOCUMENTS.
   c. USE STUDS OF GAUGE INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS. THE GAUGE STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM GAUGE TESTED, 20 GA (30 MILS) IS THE MINIMUM ALLOWED IN THESE DOCUMENTS.
4. USE STUDS OF DEPTH INDICATED BY THIS SET OF DOCUMENTS. THE DEPTH STATED BY THE REFERENCED APPROVAL OR TEST REPORT IS THE MINIMUM DEPTH TESTED DEPTH ALLOWED IN THESE DOCUMENTS. SEE STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CONSTRUCTION OF CONCRETE, MASONRY AND STUD WALLS
5. PROVIDE FIRE RATED CONSTRUCTION ASSEMBLIES WHERE INDICATED ON SHEETS G100's AND FLOOR PLAN DRAWINGS.
6. ALL DIMENSIONS ARE CENTER OF STUD OR FACE OF CONCRETE, MASONRY OR ROUGH OPENING UNLESS NOTED OTHERWISE. FACE OF STUD WILL BE NOTED AS FOS AND FACE OF FINISHED WALL WILL BE NOTED AS FOW.
7. AT ALL INTERIOR WALLS, STUDS, INSULATION AND GYPSUM BOARD ARE TO EXTEND TO THE DECK ABOVE. UNLESS NOTED OTHERWISE.
8. WALL TYPES NOT NOTED ARE ASSUMED TO MATCH ADJACENT ROOMS. SEE SHEETS FOR FINISHES, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
9. ALL METAL STUD PARTITIONS ARE CONSIDERED ACOUSTIC PARTITIONS AND ARE TO RECEIVE A TYPE 1 SOUND ATTENUATION BLANKET. THICKNESS TO MATCH STUD DEPTH, UNLESS NOTED OTHERWISE.
10. REFER TO SHEET **A520** FOR TYPICAL INTERIOR WALL CONDITIONS ASSOCIATED WITH ALL METAL STUD PARTITIONS.
11. PROVIDE CONTROL JOINTS IN METAL FRAMED WALLS AT APPROXIMATELY 30 FEET ON CENTER. LOCATE AT CORNER ABOVE DOORS OR INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. **CONSULT WITH ARCHITECT PRIOR TO COMMENCING FRAMING.** INSTALL PER DETALS **C2 AND C3/ A520** FOR CONTROL JOINTS.
12. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., GYPSUM BOARD IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM. THE OPENING FOR DUCTS OR LARGE PENETRATIONS SHALL BE FRAMED WITH A HEADER, ADD AN ANGLED CORNER BRACE IF THE GAP EXCEEDS 3" FROM FRAMING TO THE OPENING.
13. PROVIDE BLOCKING / BACKING FOR ALL WALL MOUNTED EQUIPMENT. SEE FLOOR PLANS AND INTERIOR ELEVATIONS FOR CABINETS, GRAB BARS ETC. INSTALL BLOCKING AS DETAILED OR AS REQUIRED TO MOUNT SUCH DEVICES. ALL BLOCKING IS TO BE FIRE RETARDANT TREATED. INSTALL PER SHEET **A520**
14. **WHERE THERE IS LIMITED WATER EXPOSURE:** INSTALL ONE LAYER OF 5/8" TYPE X WATER RESISTANT GYPSUM BOARD PER ASTM C1396 (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION AT THE FOLLOWING LOCATIONS:
   a. WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF JANITORS SINKS
   b. AT OTHER LOCATIONS, I.E. TOILET ROOMS AND KITCHENS, AND AS INDICATED ON THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
15. INSTALL ONE LAYER OF 5/8" GLASS MAT TILE BACKER BOARD IN LIEU OF GYPSUM BOARD (WHERE GYPSUM BOARD OCCURS) OF BASIC PARTITION WHERE THERE IS NO FIRE RATING AND OVER GYPSUM BOARD FACE LAYER AT FIRE RATED PARTITIONS AT THE FOLLOWING LOCATIONS.
16. AT WET LOCATIONS, SUCH AS SHOWER STALLS AND TUB SURROUNDS.
   a. WHERE CERAMIC TILE FINISHES ARE INDICATED PER THE FINISH PLANS AND/OR INTERIOR ELEVATIONS.
   b. AT OTHER LOCATIONS AS INDICATED BY THE ARCHITECTURAL FINISH PLANS AND ELEVATIONS.
17. WHERE NEW WALLS OR FURRING ARE INDICATED TO BE DIMENSIONED OFF OF AN EXISTING WALL, THE NEW WALL SHALL BE STRAIGHT AND PLUMB REGARDLESS OF THE CONDITION OF THE EXISTING WALL.
18. ALL EXTERIOR STUD WALLS TO HAVE CONTINUOUS INSULATION, VAPOR BARRIER AND AIR INFILTRATION BARRIER FOR THE FULL HEIGHT AND LENGTH OF THE WALL SEAL ALL PENETRATIONS. SEE DETAILS ON SHEET **A520** FOR TYPICAL TOP OF WALL CONDITION
19. THE AIR INFILTRATION BARRIER IS TO WRAP INTO ALL WINDOW AND DOOR OPENINGS.
20. SEE DETAIL **D3** AND **D4** ON SHEET **A520** FOR TYPICAL FIRE EXTINGUISHER CABINET INSTALLATION DETAILS

MASONRY OR CONCRETE WALLS

1. SEE STRUCTURAL PLANS FOR ADDITIONAL CONCRETE AND MASONRY WALL INFORMATION.
2. SEE EXTERIOR ELEVATIONS FOR COURSING, MASONRY TYPES AND METAL PANEL ORIENTATION PER **EXTERIOR ELEVATION SHEETS.**
3. ALL MASONRY WALLS ARE TO BE REINFORCED AND ARE TO BE SET ON REINFORCED FOOTINGS. SEE THE **EXTERIOR ELEVATION SHEETS** FOR LOCATION OF CONTROL JOINTS. WHERE NOT NOTED, CONTROL JOINTS TO BE LOCATED AS PER THE REQUIREMENTS FOUND IN THE STRUCTURAL DOCUMENTS BUT ARE NOT TO EXCEED 30' OC. SEE THE STRUCTURAL DRAWINGS FOR REINFORCING AND OTHER DETAILS PERTAINING TO MASONRY WALLS. IF NOT OTHERWISE NOTED, LOCATE CONTROL JOINTS AT CORNER ABOVE DOORS, INSIDE CORNER OF PILASTERS OR OTHER INCONSPICUOUS LOCATION WHERE POSSIBLE. CONSULT WITH ARCHITECT PRIOR TO INSTALLING PER DETAIL **C1/ A520**
4. SEE IBC 2021, CHAPTER 7 FOR FIRE RESISTIVE REQUIREMENTS ON NEW CONCRETE AND CONCRETE MASONRY UNIT WALLS.
   - CMU WALLS (IBC TABLE 721.1(2), ITEM 3)
   - CAST IN PLACE CONCRETE WALLS (IBC TABLE 722.2.1.1)
5. REFER TO DETAIL SHEET **A520** FOR TYPICAL WALL CONDITIONS ASSOCIATED WITH ALL AND MASONRY PARTITIONS.
6. AT WALL OPENINGS FOR PENETRATION OF PIPES, DUCTS, DEVICES, ETC., MASONRY IS TO BE CUT TO MATCH THE SHAPE AND DIMENSION OF THE PENETRATING OBJECT AND THE GAP BETWEEN THE OBJECT AND THE WALL IS TO BE SEALED W/ ACOUSTICAL OR FIRE SEALANT ON ALL SIDES WITH A 3/4" JOINT AT ALL SIDES, MAXIMUM.
7. **PROTECTION OF MASONRY:** DURING CONSTRUCTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK, EXCEPT WHEN THE AMBIENT TEMPERATURE IS EXPECTED TO REMAIN ABOVE 65 DEG F AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS. (THIS IS TO PREVENT CONDENSATION FROM COVERED WALLS CAUSING A MOISTURE PROBLEM.) COVER PARTIALLY COMPLETED MASONRY EACH DAY THAT CONSTRUCTION IS NOT IN PROGRESS. WALLS ARE TO BE PROTECTED UNTIL THEY ARE PERMANENTLY PROTECTED BY THE ROOFING MEMBRANE OVER THE CAP PLATE. THE GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY PROTECTION IMMEDIATELY FOLLOWING THE TOPPING OUT OF EACH SECTION OF WALL BY INSTALLING WATERPROOF SHEETING OVER A CONTINUOUS CAP PLATE UNTIL THE ROOFING MEMBRANE IS INSTALLED. **A SOLID GROUTED TOP BOND BEAM SHALL NOT BE CONSIDERED ADEQUATE PROTECTION FOR THE WALL.**
8. IT IS ACCEPTABLE TO PLACE NON-INTEGRAL COLORED CMU IN PORTIONS OF WALLS INDICATED TO BE CONSTRUCTED OF INTEGRAL COLOR CMU IF THE DOCUMENTS SHOW THESE PORTIONS OF WALL PAINTED OR COVERED WITH TILE, STUD FURRING, ABOVE CEILINGS OR UNDER ROOFING MEMBRANE. IT IS NOT ACCEPTABLE TO UTILIZE NON INTEGRAL COLORED CMU BEHIND CABINETS, FURNISHINGS AND EQUIPMENT INCLUDING BUT NOT LIMITED TO CLIMBING WALLS AND LOCKERS.
9. AT ALL SPLIT FACE AND PAINTED CMU THE HORIZONTAL AND VERTICAL MORTAR JOINTS ARE TO BE CONCAVE. AT ALL HONED BLOCK THE HORIZONTAL MORTAR JOINT IS TO BE A WEATHERED JOINT AND ALL VERTICAL JOINTS ARE TO BE RAKED.
10. PROVIDE A 3/4" CHAMFER ALL INTERIOR EXPOSED VERTICAL MASONRY CORNERS FROM 8' AFF TO BOTTOM OF MASONRY LINTEL OR IF NO LINTEL EXISTS, STOP CHAMFER @ FIRST MASONRY JOINT BELOW CEILING. NOTE THAT THIS CHAMFER IS NOT TO BE PROVIDED AT CORNERS SHOWN IN THESE DOCUMENTS AS COVERED WITH WALL TILE. SEE DETAIL
11. **PROVIDE SPECIAL SHAPES**, SUCH AS "U" SHAPED CHANNEL FOR LINTELS OR HEADERS AND CAPPING UNITS FOR SASH AND OTHER SPECIAL CONDITIONS.
12. WHERE SPLIT FACE BLOCK IS SHOWN EXTENDING TO THE TOP OF A PARAPET, PROVIDE AN INTEGRAL COLOR SMOOTH FACE BLOCK AT THE TOP COURSE TO ALLOW THE CAP FLASHING TO FIT TIGHT AGAINST THE WALL.
13. CONTRACTOR TO COORDINATE AND PROVIDE SMOOTH MASONRY AT ALL FLASHING, REGLETS, GUTTERS, EDGES OF CEILING AND BASE AND OTHER ITEMS REQUIRING A SMOOTH FINISH THAT ARE HIDDEN.

B1 FAx - METAL STUD - SPRAY INSUL

SCALE: 1/2" = 1'-0"

B2 FBx AND FCx - METAL STUD - BATT INSUL

SCALE: 1/2" = 1'-0"

B3 FH1 - HAT CHANNEL - NO INSUL

SCALE: 1/2" = 1'-0"

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CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
CHRISTOPHER R. KAUFMAN
7057969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

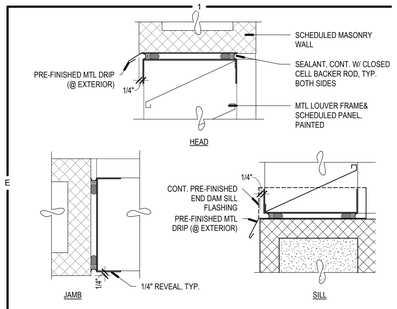
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

WALL TYPES + GENERAL NOTES

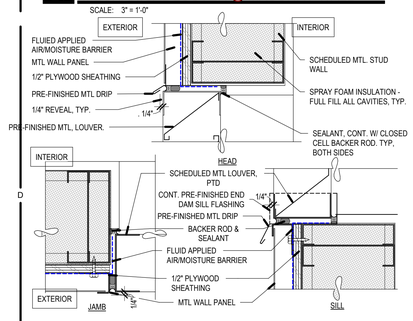
A500

11/8/2023 10:47:23 PM



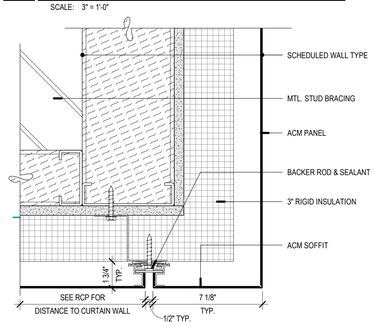
E1 MECHANICAL LOUVER @ MASONRY WALL

SCALE: 3" = 1'-0"



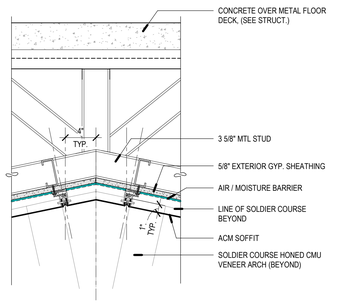
E2 TYP. SOLDIER COURSE CMU TO ACM SOFFIT

SCALE: 3" = 1'-0"



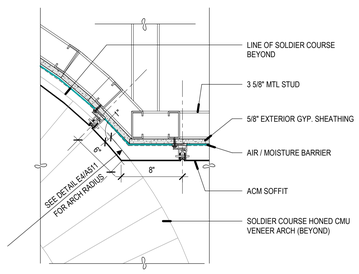
E3 CMU SOFFIT DETAIL @ ARCH

SCALE: 1 1/2" = 1'-0"



E4 ACM SOFFIT DETAIL @ ARCH

SCALE: 1 1/2" = 1'-0"



D1 MECHANICAL LOUVER @ STUD WALL

SCALE: 3" = 1'-0"

D2 TYP. ACM PANEL TO ACM SOFFIT DETAIL

SCALE: 3" = 1'-0"

D3 ACM SOFFIT DETAIL @ ARCH

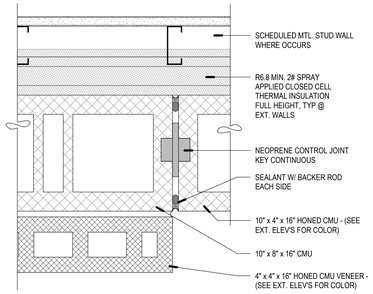
SCALE: 1 1/2" = 1'-0"

D4 ACM SOFFIT DETAIL @ ARCH

SCALE: 1 1/2" = 1'-0"

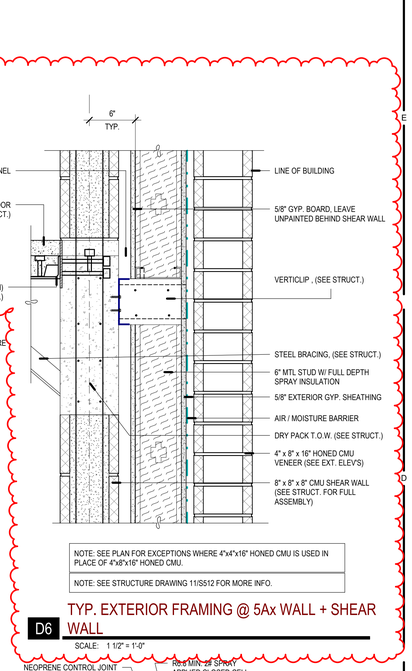
D5 TYP. EXTERIOR FRAMING @ 5Ax WALL

SCALE: 1 1/2" = 1'-0"



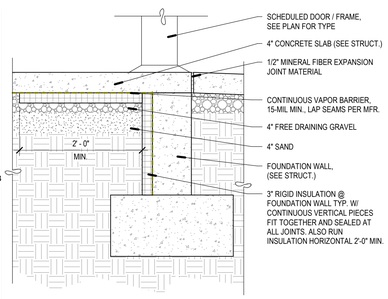
D6 TYP. EXTERIOR FRAMING @ 5Ax WALL + SHEAR WALL

SCALE: 1 1/2" = 1'-0"



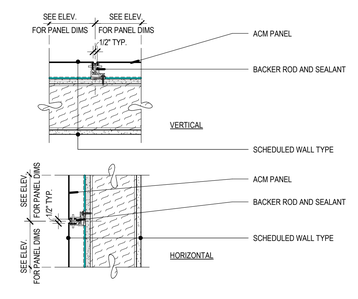
C1 TYP PLUMB + ELEC PENETRATION

SCALE: 1 1/2" = 1'-0"



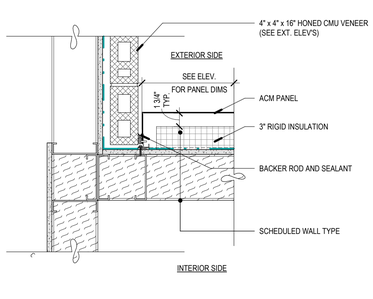
C2 TYP. COLUMN PLAN DETAILS

SCALE: 1" = 1'-0"



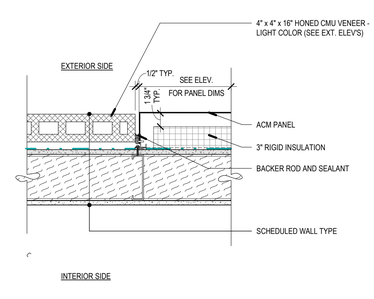
C3 TYP. PILASTER PLAN DETAIL

SCALE: 1 1/2" = 1'-0"



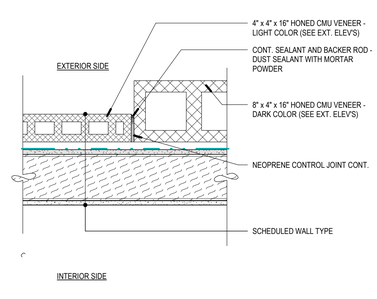
C4 COLUMN PLAN DETAIL @ STAIR BUMPOUT

SCALE: 1 1/2" = 1'-0"



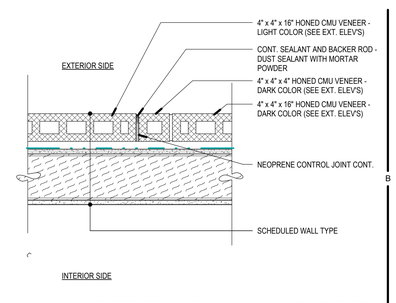
C5 MASONRY CONTROL JOINT @ AREA 12 TOWERS

SCALE: 3" = 1'-0"



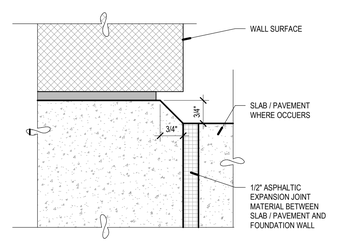
C6 TYP. MASONRY CONTROL JOINT

SCALE: 3" = 1'-0"



B1 TYP. FOUNDATION @ ENTRANCES

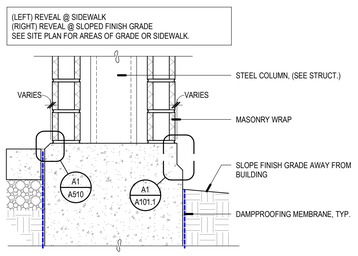
SCALE: 1" = 1'-0"



WHERE THE ELEVATION OF THE ADJACENT CONCRETE SIDEWALK / PAVEMENT THREATENS TO EXTEND ABOVE THE TYPICAL FOUNDATION REVEAL (APPROX. 5" AND LESS) TRANSITION THE REVEAL TO A SIMPLE 3/4" CHAMFER TO AVOID THE PAVEMENT EXTENDING UNDER THE LIP OF MASONRY AND POPPING THE FACE SHELL. COORDINATE WITH THE ARCHITECT FOR FINAL LOCATIONS.

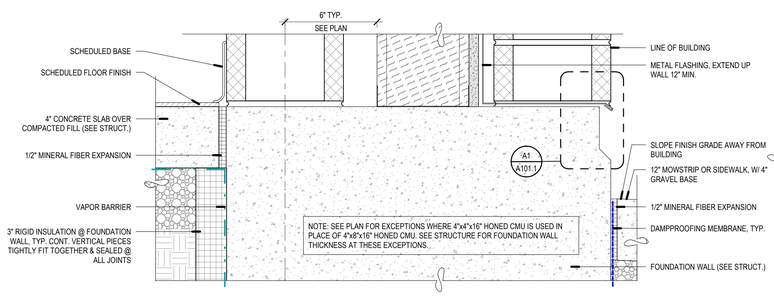
B2 TYP. ACM PANEL WET SEAL JOINT

SCALE: 1 1/2" = 1'-0"



B3 CMU VENEER TRANSITION @ ACM PANEL (PREP.)

SCALE: 1 1/2" = 1'-0"

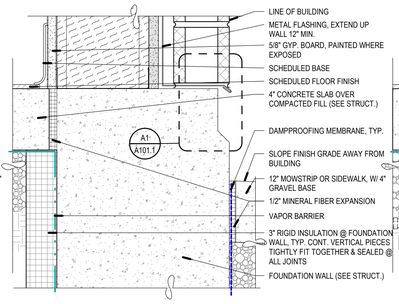


B4 CMU VENEER TRANSITION @ ACM PANEL (PARALLEL)

SCALE: 1 1/2" = 1'-0"

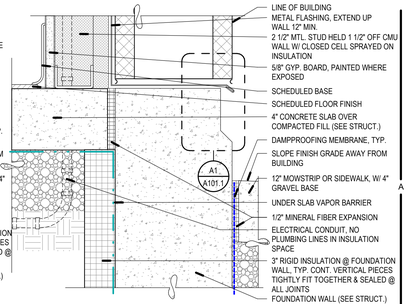
B5 CMU VENEER TRANSITION @ 4" TO 8" BUMPOUT

SCALE: 1 1/2" = 1'-0"



B6 CMU VENEER TRANSITION @ RUNNING BOND TO STACK BOND

SCALE: 1 1/2" = 1'-0"



A1 FOUNDATION REVEAL @ SIDEWALK

SCALE: 6" = 1'-0"

A2 FOUNDATION @ COL. / BUMPOUT PIER

SCALE: 1 1/2" = 1'-0"

A3 TYP. FOUNDATION @ 5Ax + SHEAR WALL

SCALE: 3" = 1'-0"

A5 TYP. FOUNDATION @ 5Ax WALL

SCALE: 3" = 1'-0"

A6 TYP. FOUNDATION @ 4Ax WALL

SCALE: 3" = 1'-0"

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CLIENT NUMBER: -
DATE: DECEMBER 12 2023

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
6	2023-08-09	RFI 01
7	11/27/2023	BPS-ADDENDUM 03
10	12/26/2023	PR-01

OSD HILLCREST ELEMENTARY REBUILD

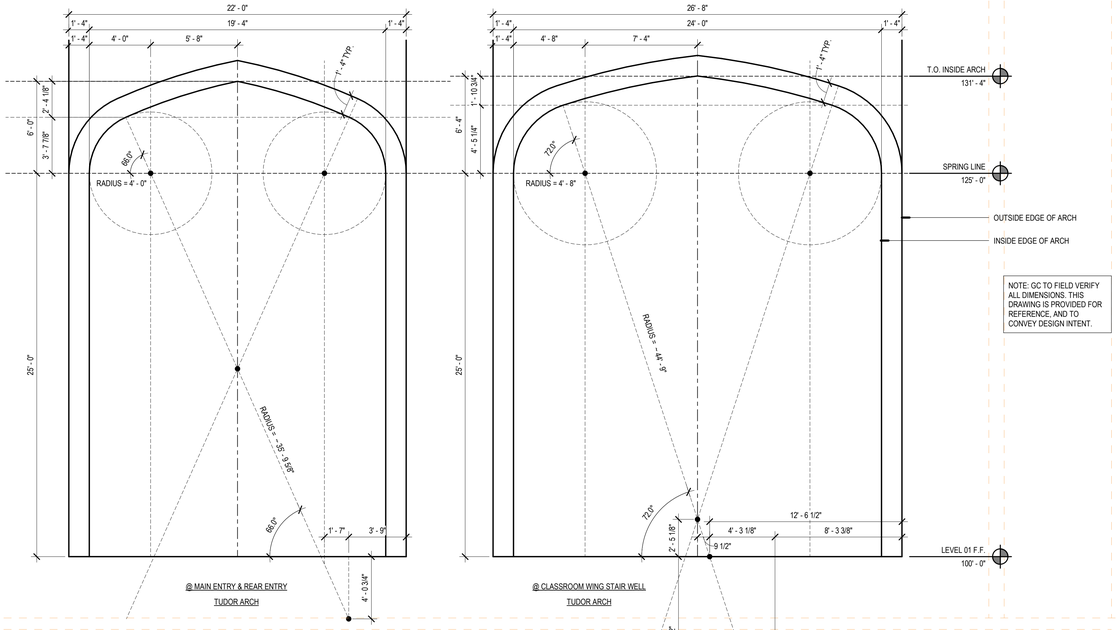
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

EXTERIOR DETAILS

A510

12/26/2023 4:45:14 PM



@ MAIN ENTRY & REAR ENTRY

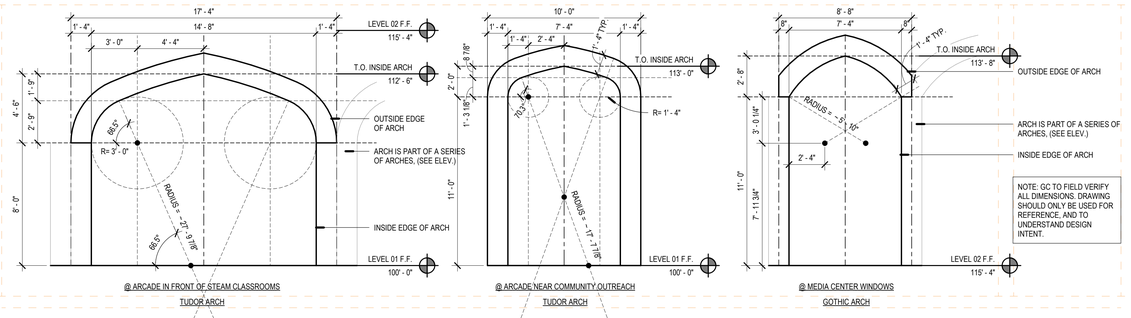
TUDOR ARCH

@ CLASSROOM WING STAIR WELL

TUDOR ARCH

D1 4 CENTER (TUDOR) ARCH PROPORTIONS @ ENTRY'S & STAIR TOWERS

SCALE: 1/4" = 1'-0"



@ ARCADE IN FRONT OF STEAM CLASSROOMS

TUDOR ARCH

@ ARCADE NEAR COMMUNITY OUTREACH

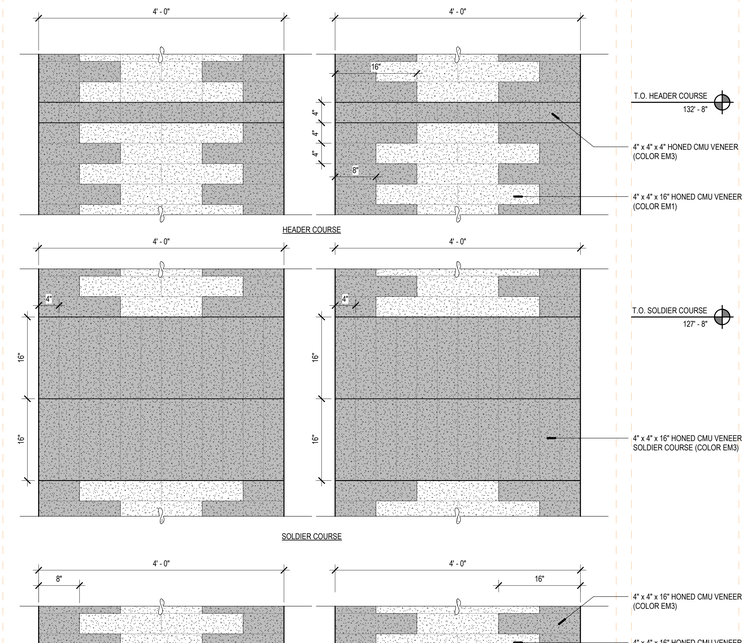
TUDOR ARCH

@ MEDIA CENTER WINDOWS

GOTHIC ARCH

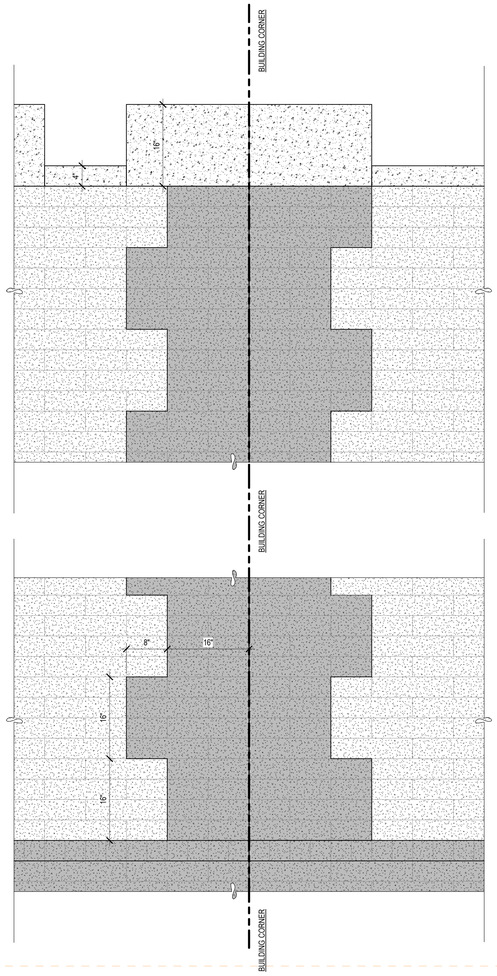
E4 TUDOR & GOTHIC ARCH PROPORTIONS @ ARCADE'S & MEDIA CENTER WINDOWS

SCALE: 1/4" = 1'-0"



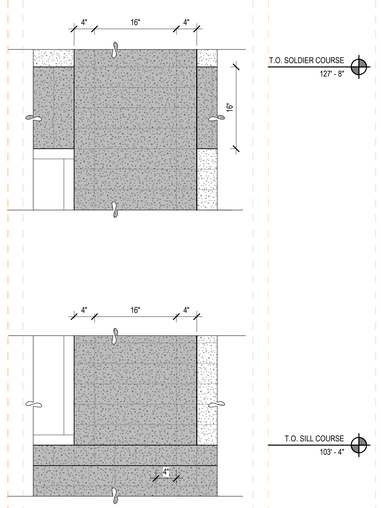
A1 TYP. SMALL QUOIN CMU PATTERN @ TOWER

SCALE: 1" = 1'-0"



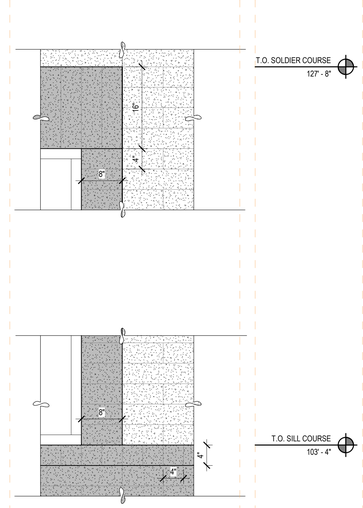
A3 TYP. LARGE QUOIN CMU PATTERN

SCALE: 1" = 1'-0"



A5 TYP. STACK BOND CMU PATTERN @ WINDOWS

SCALE: 1" = 1'-0"



A6 STACK BOND CMU PATTERN @ TEACH COLLAB.

SCALE: 1" = 1'-0"

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CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
JOSEPH SHEEHAN
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

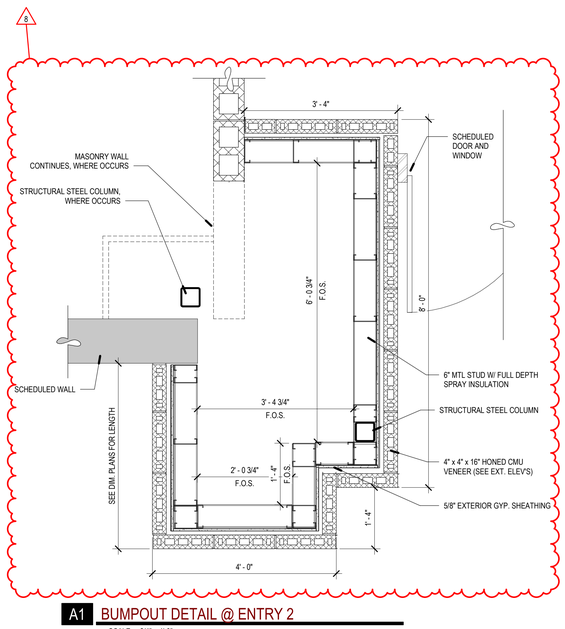
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

EXTERIOR DETAILS

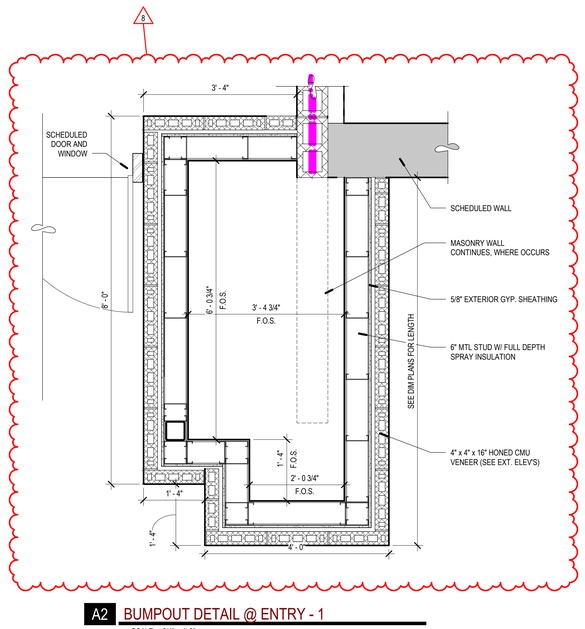
A511

11/8/2023 10:47:34 PM



A1 BUMPOUT DETAIL @ ENTRY 2

SCALE: 3/4" = 1'-0"



A2 BUMPOUT DETAIL @ ENTRY - 1

SCALE: 3/4" = 1'-0"

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CLIENT NUMBER: -
DATE: DECEMBER 08, 2023

STATE OF UTAH — 7067998 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
8	12/04/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

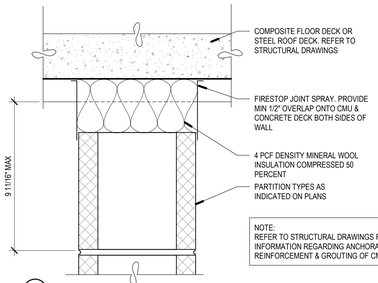
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

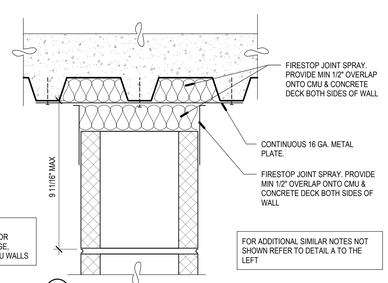
EXTERIOR DETAILS

A512

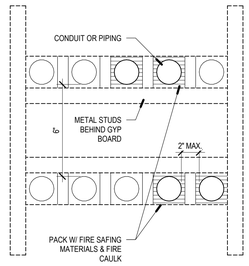
12/4/2023 3:26:46 PM



A PERPENDICULAR TO METAL DECK FLUTES



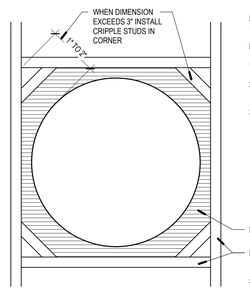
B PARALLEL TO METAL DECK FLUTES



NOTES:

1. CUT GYP BOARD TIGHT TO DUCT. (MAX. GAP OF 1/4") SEAL AS REQ'D.
2. THROUGH CONCRETE WALLS, USE W-J-1116. THROUGH GYP BOARD WALL, USE W-L-1018.

SIMILAR TO UL CAJ8101

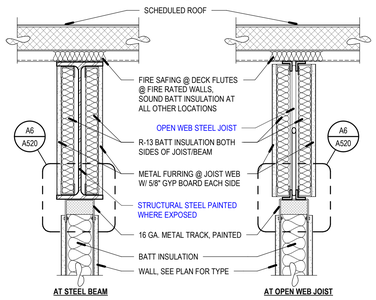


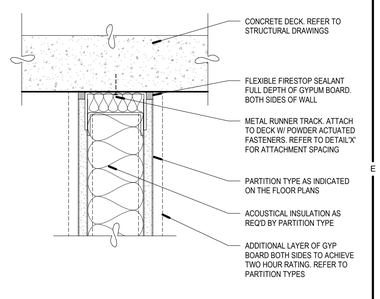
FOR STEEL STUD WALLS USE 1 HR. RATED APPLICATION

NOTES:

1. ALL FIRE DAMPERS TO BE INSIDE WALL.
2. CUT GYP BOARD TIGHT TO DUCT. (MAX. GAP OF 1/4") SEAL AS REQ'D.
3. IF DUCT IS TO BE INSULATED, DO NOT RUN INSULATION THROUGH WALL. FLARE INSULATION ONTO F.O. WALL AROUND DUCT ON BOTH SIDES OF WALL & SEAL TO F.O. WALL W/ INSULATION MASTIC.

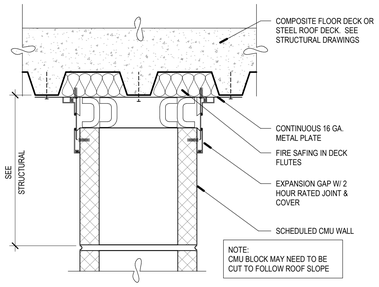
SIMILAR TO UL CAJ8101





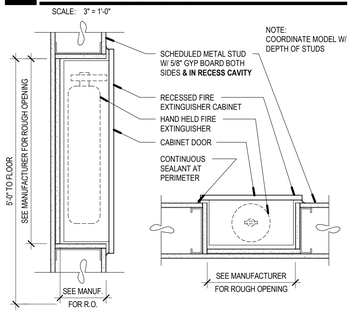
E1 MASONRY HEAD - RATED

SCALE: 3" = 1'-0"



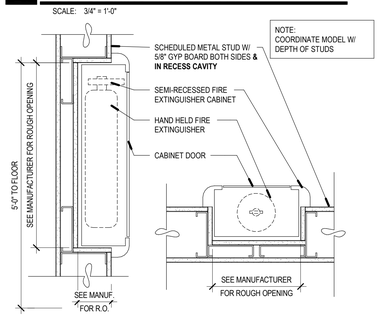
E3 CONDUIT PENETRATION

SCALE: 3" = 1'-0"



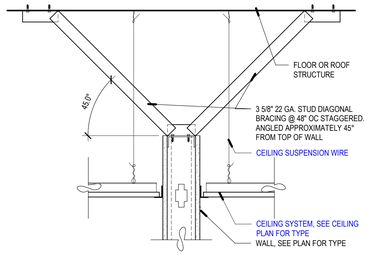
E4 DUCT OPENING - RATED WALL

SCALE: 3/4" = 1'-0"



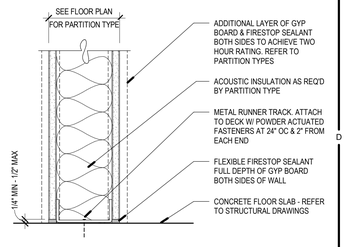
E5 SLIP JOINT - BEAM / JOIST

A4/ A312 SCALE: 1 1/2" = 1'-0"



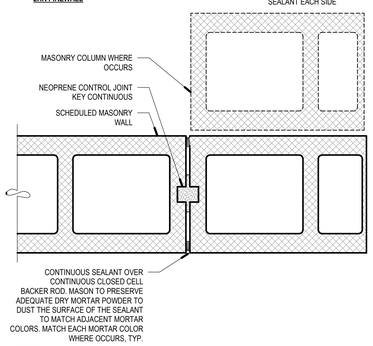
E6 PARTITION HEAD - RATED

C2/ A500 SCALE: 3" = 1'-0"



D1 EXPANSION HEAD - CMU

SCALE: 3" = 1'-0"



C1 CONTROL JOINT - TYP

SCALE: 3" = 1'-0"

1 HOUR OR NON-RATED

C3 CONTROL JOINT - STUD - 2 HR - TYP

SCALE: 3" = 1'-0"

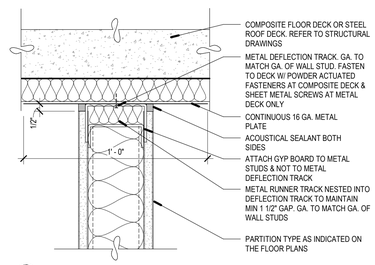
2 HOUR RATED

C4 EDGE DETAIL

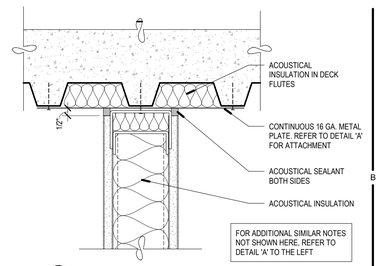
SCALE: 1 1/2" = 1'-0"

C5 PARTITION HEAD - NON-RATED

C2/ A500 SCALE: 3" = 1'-0"



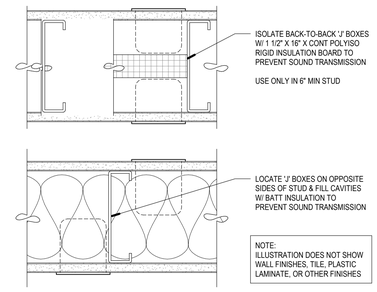
A PERPENDICULAR TO METAL DECK FLUTES



B PARALLEL TO METAL DECK FLUTES

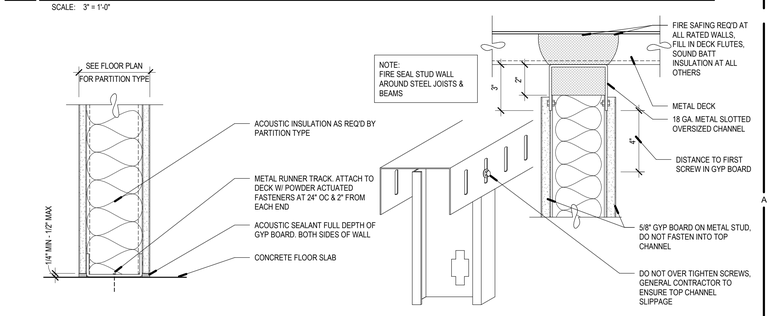
B2 ELECTRICAL DEVICE - TYP

SCALE: 3" = 1'-0"



B5 PARTITION HEAD - ACOUSTIC - NON-RATED

SCALE: 3" = 1'-0"



D3 FIRE EXT CABINET

SCALE: 1 1/2" = 1'-0"

D4 FIRE EXT CABINET - SEMI

SCALE: 1 1/2" = 1'-0"

D5 WALL BRACING - TYP

SCALE: 1 1/2" = 1'-0"

A PERPENDICULAR TO METAL DECK FLUTES

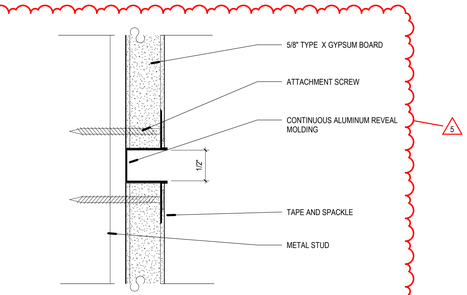
B PARALLEL TO METAL DECK FLUTES

D6 PARTITION BASE - RATED

C2/ A500 SCALE: 3" = 1'-0"

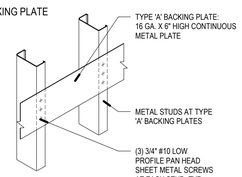
A1 GYP. BOARD REVEAL DETAIL

SCALE: 12" = 1'-0"



PROVIDE BACKING PLATES AS INDICATED ON THE DRAWINGS OR WHERE NOT INDICATED, ACCORDING TO THE FOLLOWING SCHEDULE. REFER TO DETAILS ELSEWHERE IN THE SET OF DRAWINGS FOR THE SUPPORT OF WALL MOUNTED ITEMS IN EXCESS OF 200 LBS

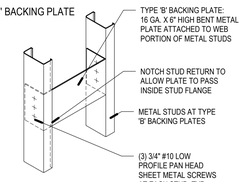
TYPE 'A' BACKING PLATE



TYPE 'A' BACKING PLATES:

- AT DOOR STOPS & BUMPER RAILS
- AT TOILET ACCESSORIES, MIRRORS, COAT HOOKS, ETC.
- AT ALL UPPER WALL HUNG CABINETS
- AT ALL BASE CABINETS
- AT ALL FULL HEIGHT CABINETS
- AT WALL MOUNTED ADJUSTABLE SHELVING
- AT ALL WALL MOUNTED HANDRAILS

TYPE 'B' BACKING PLATE



TYPE 'B' BACKING PLATES:

TYPE 'B' BACKING PLATE SHALL SUPPORT THE SAME ITEMS AS TYPE 'A' BACKING PLATE BUT USE WHERE APPEARANCE IS THE MAIN CONCERN SUCH AS LOBBIES & OTHER HIGH DESIGN AREAS.

A3 BACKING PLATE - SCHEDULE

SCALE: 3/16" = 1'-0"

A5 PARTITION BASE - NON-RATED

C2/ A500 SCALE: 3" = 1'-0"

A6 PARTITION - SLIP JOINT - TYP

ES/ A520 SCALE: 3" = 1'-0"

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SALT LAKE CITY, UT 84102
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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH
REGISTERED
7067809
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

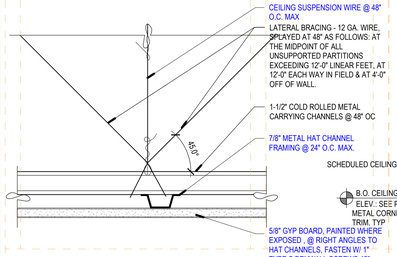
130 N. ECCLES AVE., OGDEN, UT 84404

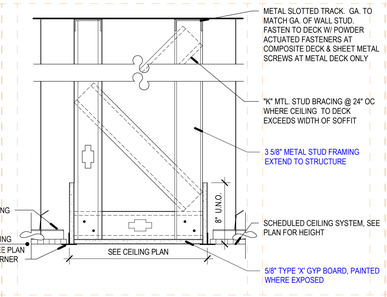
BID PACKAGE 5 - GENERAL CONSTRUCTION

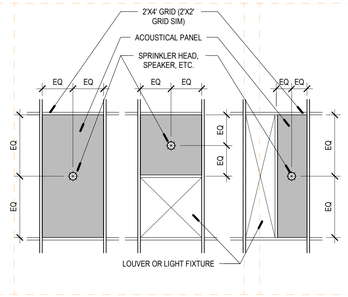
INTERIOR FRAMING DETAILS

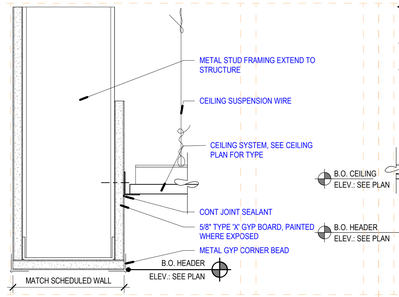
A520

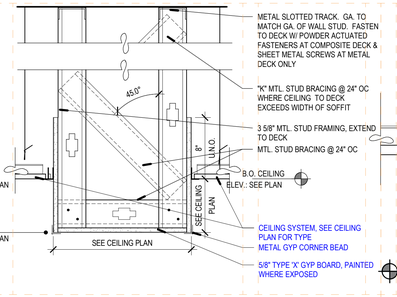
11/17/2023 12:38:14 PM

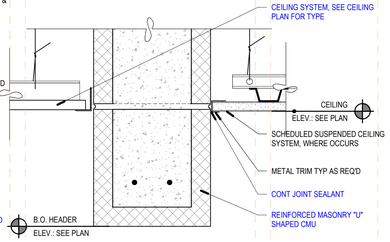






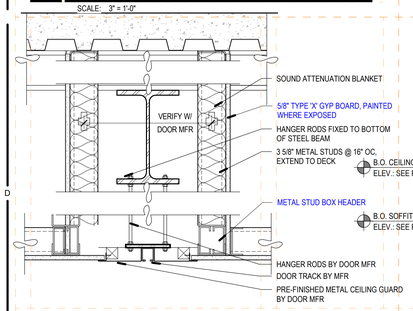






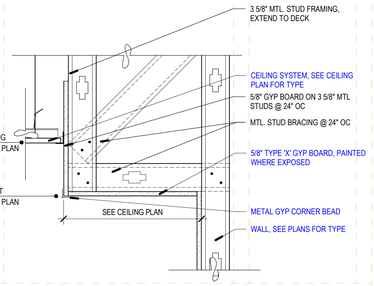
E2 SUSPENDED CEILING - GYP - TYP

SCALE: 3" = 1'-0"



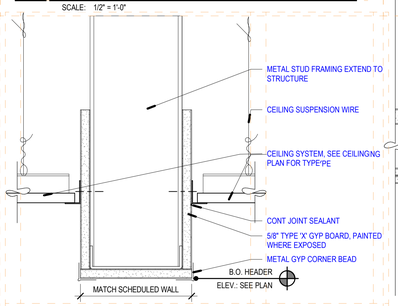
E1 SOFFIT - FLUSH FRAMED - TYP

SCALE: 1 1/2" = 1'-0"



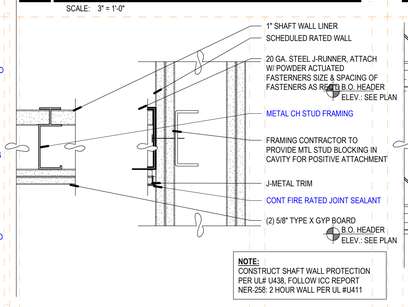
E3 CEILING TILE - PENETRATION - TYP

SCALE: 1/2" = 1'-0"



E4 METAL STUD - HEADER - CEILING ONE SIDE

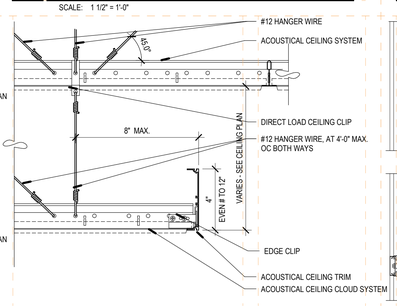
SCALE: 3" = 1'-0"



NOTE:
CONSTRUCT SHAFT WALL PROTECTION PER UL# U438, FOLLOW ICC REPORT NER-258: 2 HOUR WALL PER UL #U411

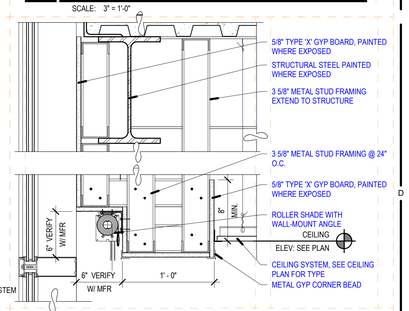
E5 SOFFIT - TYP

SCALE: 1 1/2" = 1'-0"



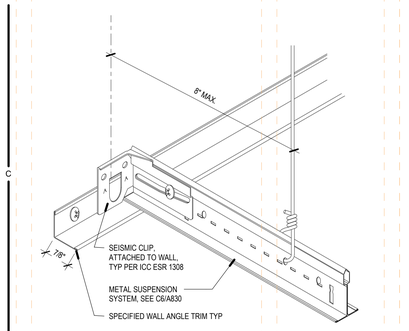
E6 MASONRY HEAD - TYP

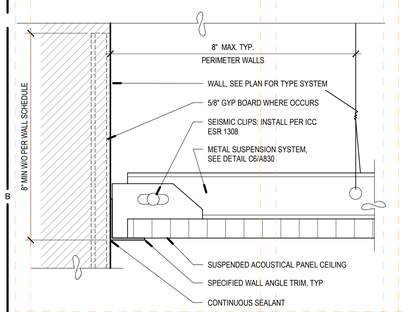
SCALE: 3" = 1'-0"



D2 FOLDING PARTITION - HEAD

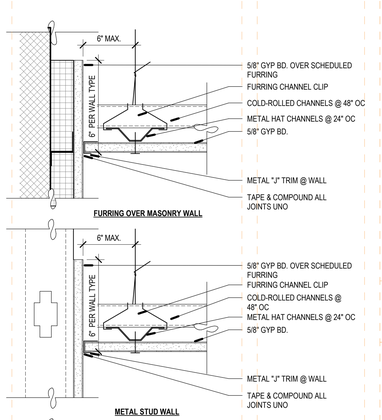
SCALE: 1 1/2" = 1'-0"





D1 SOFFIT - WALL - TYP

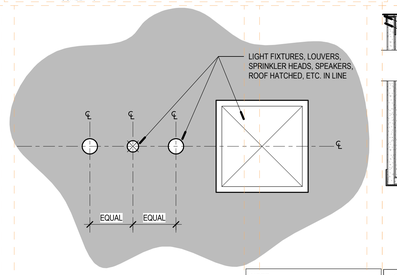
SCALE: 1 1/2" = 1'-0"



NOTE:
1. SEE XX/XXX FOR SEISMIC BRACING INFORMATION
2. INSTALL GYP TO USG STANDARDS

D3 METAL STUD - HEADER - TYP

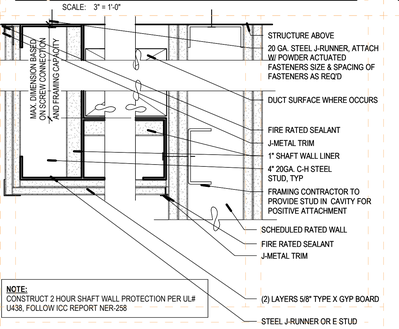
SCALE: 3" = 1'-0"



NOTE:
ALL FIXTURES TO BE IN LINE & CENTERED IN FIELD UNO

D4 SHAFT WALL - HORIZONTAL

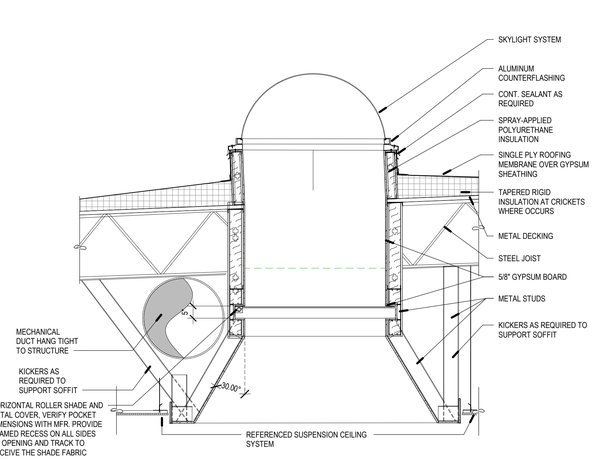
SCALE: 3" = 1'-0"



NOTE:
CONSTRUCT 2 HOUR SHAFT WALL PROTECTION PER UL# U438, FOLLOW ICC REPORT NER-258

D5 CLOUD - TYP

SCALE: 3" = 1'-0"



D6 WINDOW SHADE

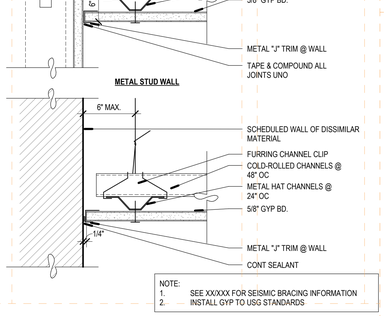
SCALE: 1 1/2" = 1'-0"

B1 SUSPENDED CEILING - TYP

SCALE: 6" = 1'-0"

B2 SLIP JOINT

SCALE: 3" = 1'-0"



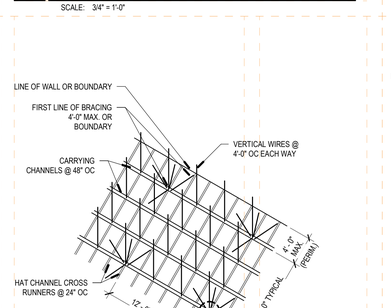
NOTE:
1. SEE A3/A530 FOR SEISMIC BRACING INFORMATION

C3 GYP BOARD CEILING - FIXUTRE - TYP

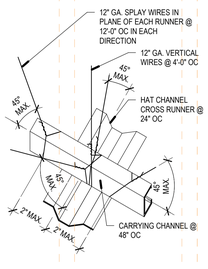
SCALE: 3/4" = 1'-0"

A3 SUSPENDED CEILING - GYP BRACING - TYP

SCALE: 6" = 1'-0"

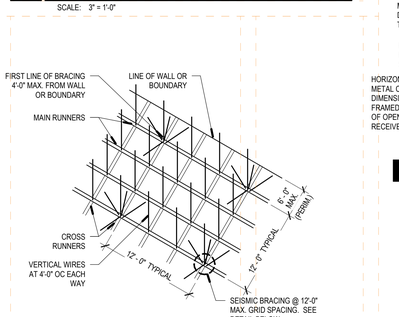


NOTES:
1. ALL SPLAY WIRES TO BE IN LINE W/ ATTACHED COMPONENT
2. ALL SPLAY WIRES TO BE TAUT & TIED BOTH ENDS W/ MIN OF 3 TURNS IN 1" OF RUN.
3. AREAS SMALLER THAN 1,000 SQ. FT. W/ WALLS ON 4 SIDES EXTENDING TO STRUCTURE NEED NOT BE BRACED.
4. ALL CEILING MOUNTED LIGHT FIXTURES SHALL BE ATTACHED TO THE SUSPENDED CEILING GRID. IN ADDITION 12 GA. HANGER WIRES SHALL BE ATTACHED TO THE GRID WITHIN 3" OF EACH CORNER OF THE LIGHT HOUSING & TO THE STRUCTURE ABOVE (THESE WIRES MAY BE SLACK.)
5. WIRES SHALL NOT ATTACH TO OR BEND AROUND INTERFERING MATERIAL OR EQUIPMENT NOR SHALL THEY BE CLOSER THAN 6" FROM ANY UN-BRACED HORIZONTAL PIPING OR DUCTWORK. A TRAPEZE OR SIMILAR DEVICE SHALL BE USED WHERE OBSTRUCTIONS OCCUR.
6. GYP BOARD TO BE INSTALLED @ RIGHT ANGLES TO 7/8" HAT CHANNEL RUNNERS. FASTEN W/ 1" TYPE 'S' DRYWALL SCREWS @ 12" OC TYP @ EDGES & IN FIELD AS PER USG STANDARDS.
7. ALL SUSPENDED CEILING TO MEET THE REQUIREMENTS OF THE IBC SECTION 2506.1 & 803, ASTM C635-00, ASTM C636-96, ASTM E 1264, ASCE / SEI 7-05 SECTION 12.5.6.2.2, ICC REPORT ESR-1308

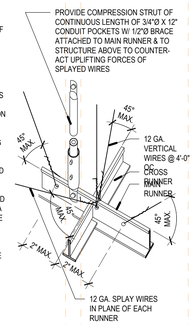


C4 SHAFT WALL - SOFFIT

SCALE: 3" = 1'-0"

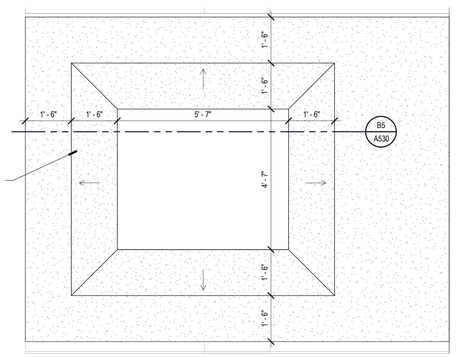


NOTES:
1. ALL SPLAY WIRES TO BE IN LINE W/ ATTACHED COMPONENT
2. ALL SPLAY WIRES TO BE TAUT & TIED BOTH ENDS W/ MIN OF 3 TURNS IN 1" OF RUN.
3. AREAS SMALLER THAN 144 SQ. FT. W/ WALLS ON 4 SIDES EXTENDING TO STRUCTURE NEED NOT BE BRACED.
4. COMPRESSIVE STRUTS REQ'D @ 12'-0" OC
5. ALL CEILING MOUNTED LIGHT FIXTURES SHALL BE ATTACHED TO THE SUSPENDED CEILING GRID. IN ADDITION 12 GA. HANGER WIRES SHALL BE ATTACHED TO THE GRID WITHIN 3" OF EACH CORNER OF THE LIGHT HOUSING & TO THE STRUCTURE ABOVE (THESE WIRES MAY BE SLACK.)
6. WIRES SHALL NOT ATTACH TO OR BEND AROUND INTERFERING MATERIAL OR EQUIPMENT NOR SHALL THEY BE CLOSER THAN 6" FROM ANY UN-BRACED HORIZONTAL PIPING OR DUCTWORK. A TRAPEZE OR SIMILAR DEVICE SHALL BE USED WHERE OBSTRUCTIONS OCCUR.
7. PROVIDE 7/8" WIDE PERIMETER WALL MOULDING AT ALL WALLS.
8. ALL SUSPENDED CEILING TO MEET THE REQUIREMENTS OF THE IBC SECTION 2506.1 & 803, ASTM C635-00, ASTM C636-96, ASTM E 1264, ASCE / SEI 7-05 SECTION 12.5.6.2.2, ICC REPORT ESR-1308



B5 SKYLIGHT FLARE DETAIL

SCALE: 1/2" = 1'-0"



A1 SUSPENDED CEILING - WOOD PANEL

SCALE: 3" = 1'-0"

A2 TYP. BALCONY EDGE DETAIL

SCALE: 1" = 1'-0"

A4 SUSPENDED CEILING - SEISMIC BRACING

SCALE: 6" = 1'-0"

A5 SKYLIGHT DETAIL - TYP

SCALE: 1/2" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
CHAD W. CLARK
7067909
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

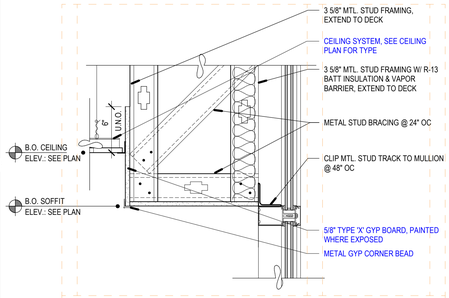
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

CEILING DETAILS

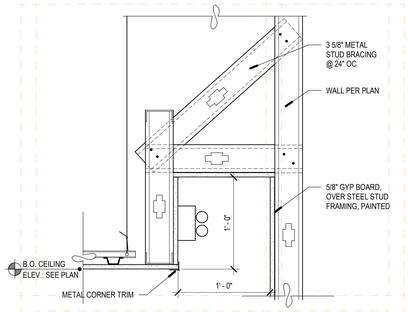
A530

11/8/2023 10:47:30 PM



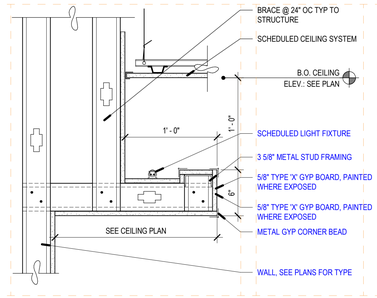
D1 CURTAIN WALL - MULLION - SOFFIT - TYP

SCALE: 1 1/2" = 1'-0"



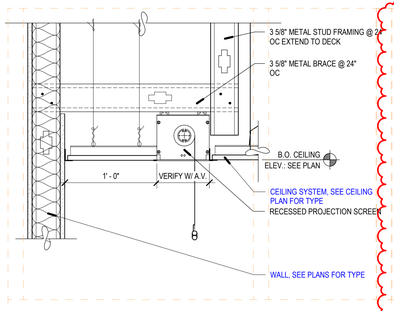
D2 CEILING COVE

SCALE: 1 1/2" = 1'-0"



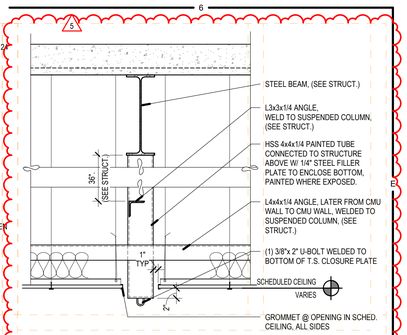
D4 LIGHT SOFFIT - TYP

SCALE: 1 1/2" = 1'-0"



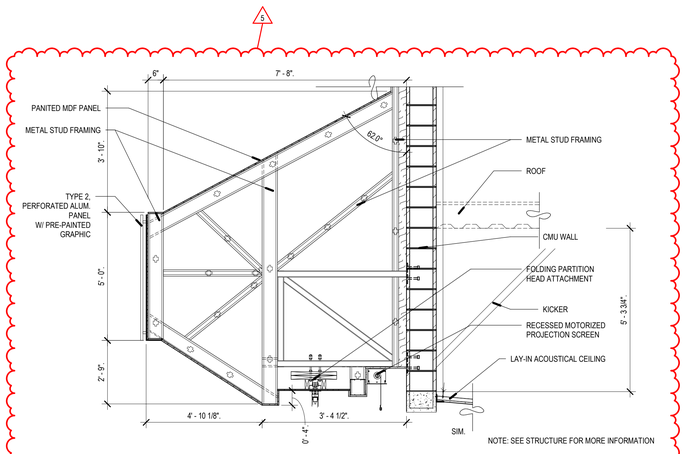
D5 PROJECTION SCREEN - TYP

SCALE: 1 1/2" = 1'-0"



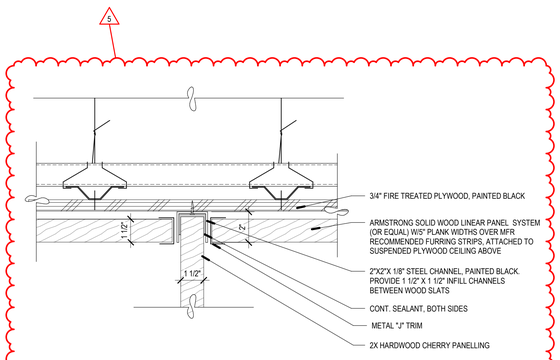
E6 SUSPENDED COLUMN

SCALE: 1" = 1'-0"



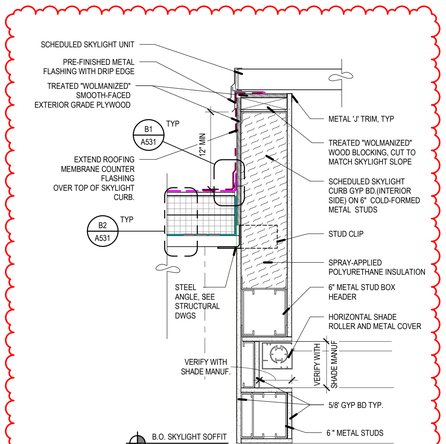
C1 PROSCENEUM HEAD DETAIL

SCALE: 1/2" = 1'-0"



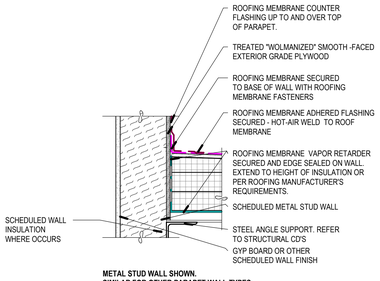
C3 SUSPENDED CEILING - WOOD RAILING @ WOOD CEILING

SCALE: 3" = 1'-0"



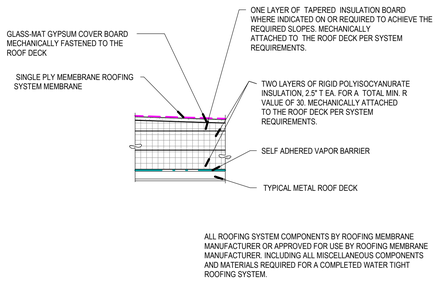
C4 FLAT SKYLIGHT @ GYM DETAIL

SCALE: 1 1/2" = 1'-0"



B1 METAL PANEL PARAPET WALL BASE

SCALE: 1 1/2" = 1'-0"



B2 TYP ROOFING SYSTEM ASSEMBLY

SCALE: 1 1/2" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH
BRAD SHERWOOD
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

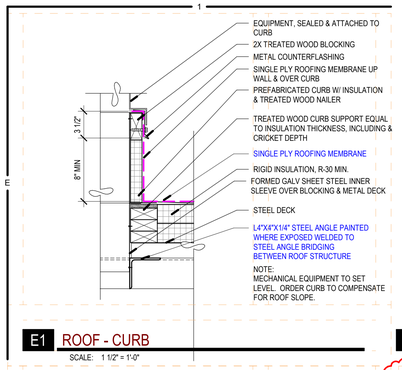
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

CEILING DETAILS

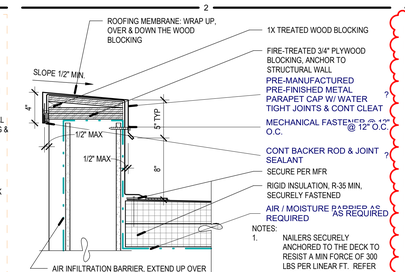
A531

11/17/2023 12:38:19 PM



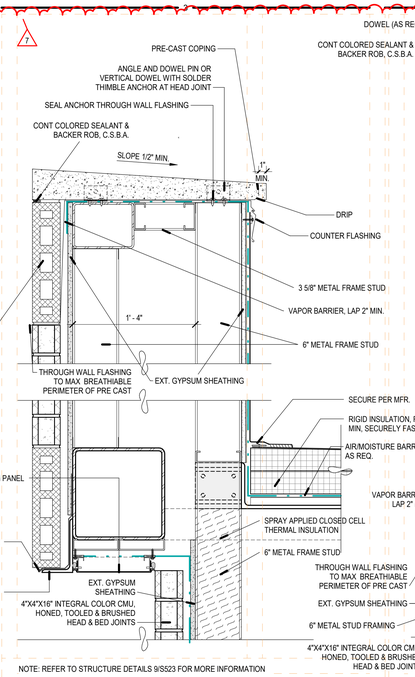
E1 ROOF - CURB

SCALE: 1 1/2" = 1'-0"

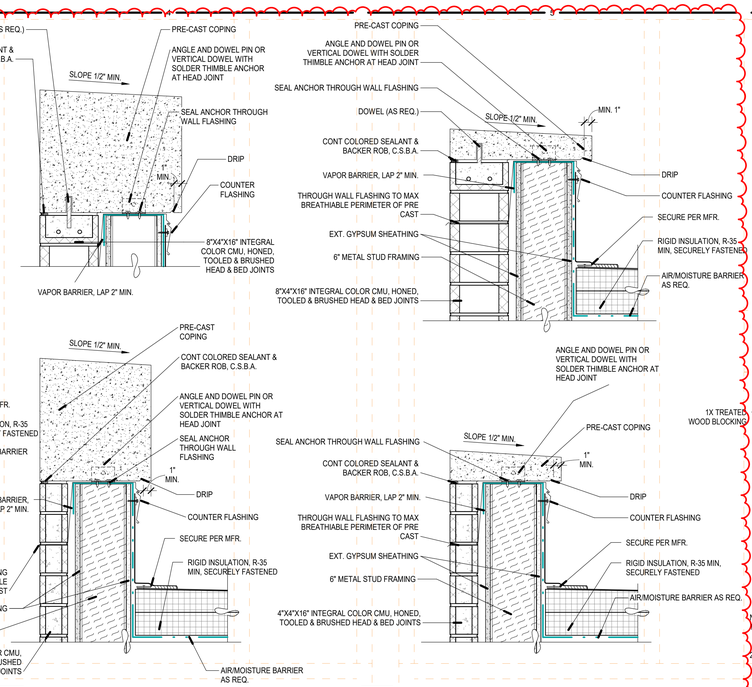


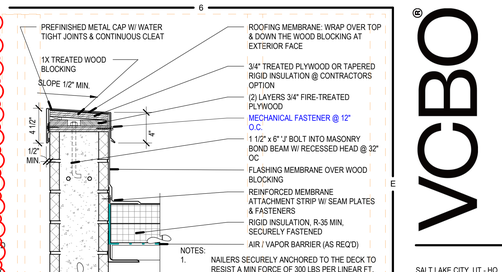
E2 PARAPET @ EXTERIOR STUD WALL

SCALE: 1 1/2" = 1'-0"



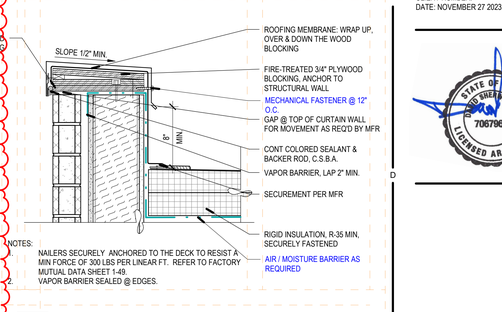
NOTE: REFER TO STRUCTURE DETAILS 9/S523 FOR MORE INFORMATION

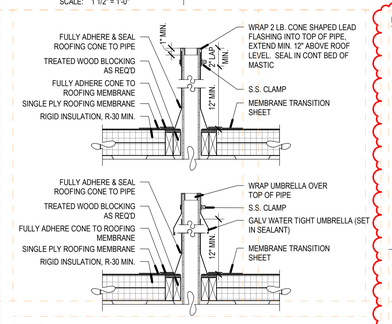




E6 TYP. PARAPET CAP @ MASONRY

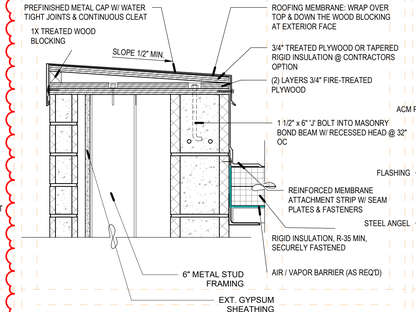
A1/ A131.1 SCALE: 1 1/2" = 1'-0"





D1 ROOF - PENETRATION

SCALE: 1" = 1'-0"



D2 PARAPET CAP @ 5Ax WALL + CMU

SCALE: 1 1/2" = 1'-0"

D3 PRECAST CAP @ STAIRWELLS

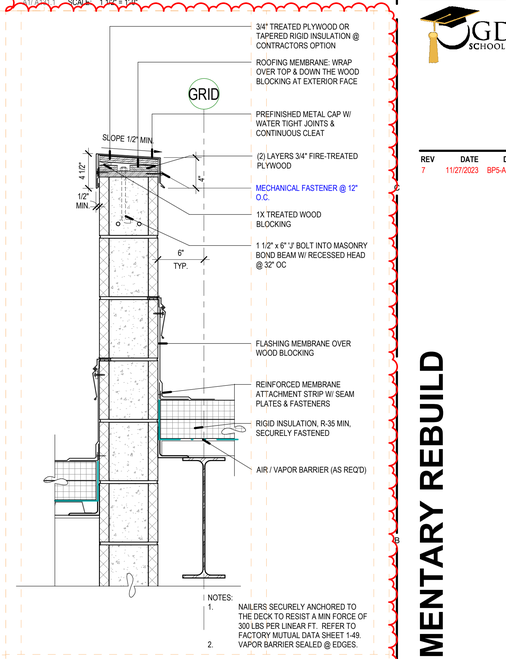
SCALE: 1 1/2" = 1'-0"

D4 TYP. PRECAST CAP @ CRENELLATIONS

SCALE: 1 1/2" = 1'-0"

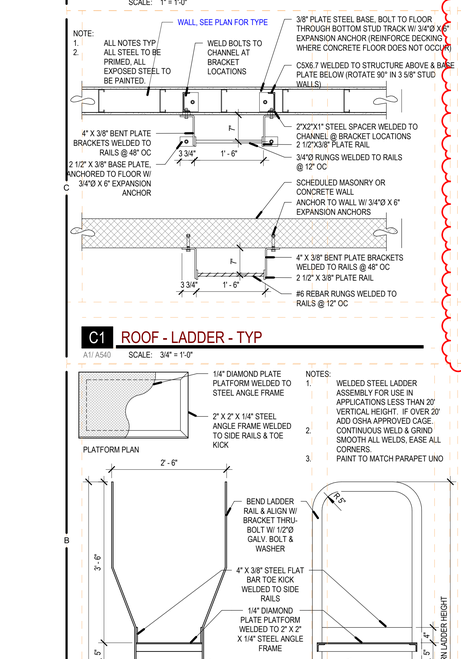
D5 TYP. PRECAST CAP DETAIL

SCALE: 1 1/2" = 1'-0"



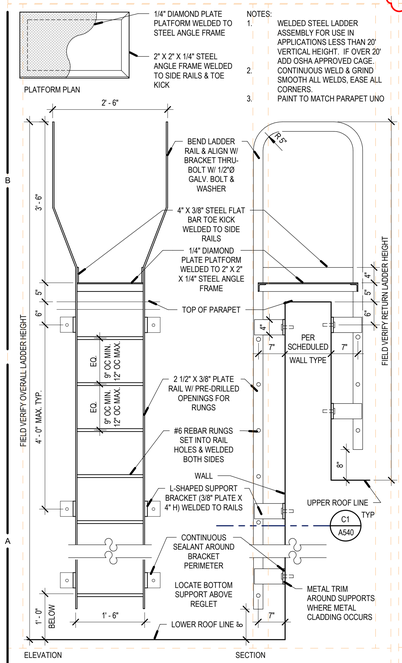
D6 TYP. PARAPET CAP @ 5Ax STUD WALL

A1/ A131.1 SCALE: 1 1/2" = 1'-0"



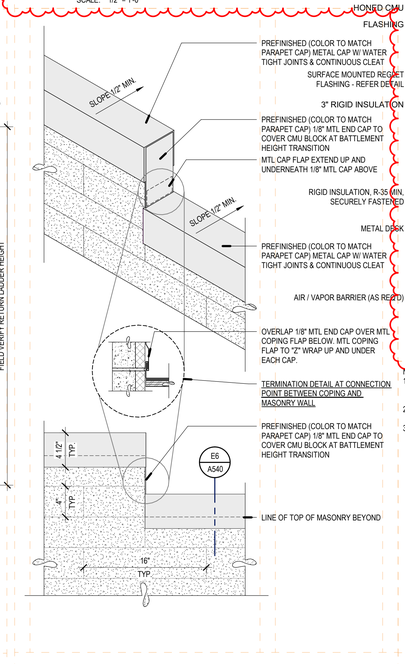
C1 ROOF - LADDER - TYP

A1/ A540 SCALE: 3/4" = 1'-0"



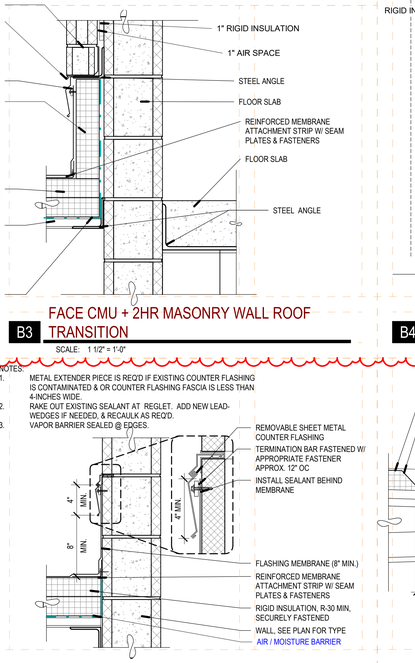
A1 ROOF - LADDER

A1/ A132.1 SCALE: 3/4" = 1'-0"



C2 TYPICAL LONG ROOF HATCH DETAIL

SCALE: 1/2" = 1'-0"

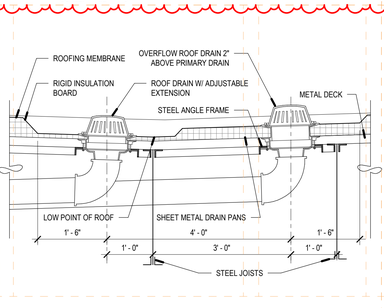


C3 TYP. FACE CMU TO ROOF TRANSITION

SCALE: 1 1/2" = 1'-0"

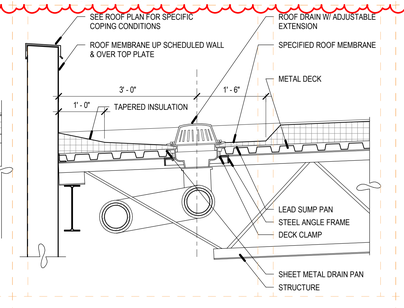
B3 FACE CMU + 2HR MASONRY WALL ROOF TRANSITION

SCALE: 1 1/2" = 1'-0"



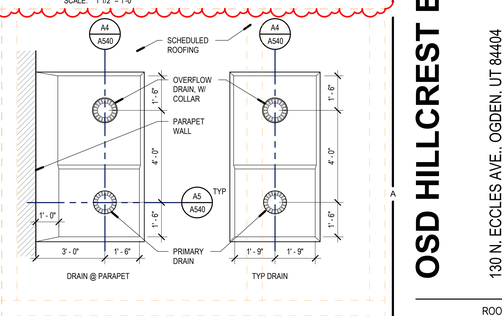
B4 PARAPET CAP @ DOUBLE BEAM W/ ROOF TRANSITION

SCALE: 1 1/2" = 1'-0"



B5 PARAPET CAP @ SINGLE BEAM W/ ROOF TRANSITION

SCALE: 1 1/2" = 1'-0"



B6 PARAPET CAP @ ROOF TRANSITION

SCALE: 1 1/2" = 1'-0"

A3 TYP. EMBEDED REGLET

A1/ A208 SCALE: 1 1/2" = 1'-0"

A4 ROOF DRAIN SECTION A-A

A6/ A540 SCALE: 3/4" = 1'-0"

A5 ROOF DRAIN SECTION B-B

A6/ A540 SCALE: 3/4" = 1'-0"

A6 TYP. ROOF DRAIN

SCALE: 3/8" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH — JOSEPH SHEPPARD — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ROOF DETAILS

A540

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CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH
CHRISTOPHER D. GAMVROULAS
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
6	2023-08-09	RFI 01

OSD HILLCREST ELEMENTARY REBUILD

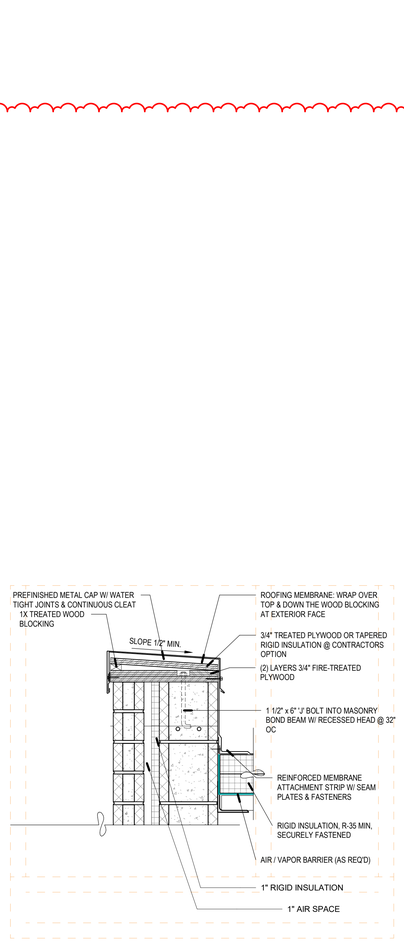
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ROOF DETAILS

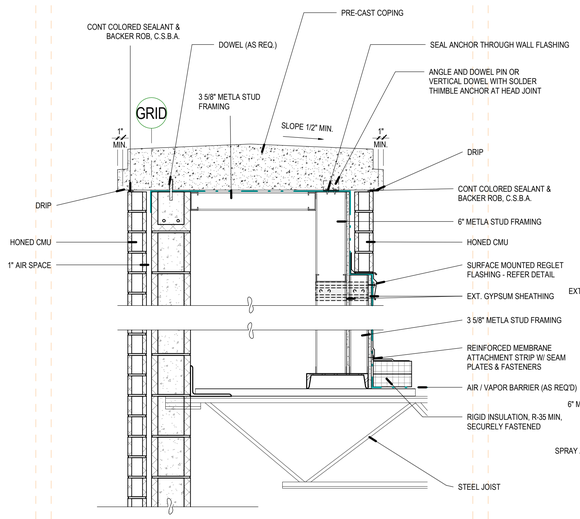
A541

11/17/2023 12:38:30 PM



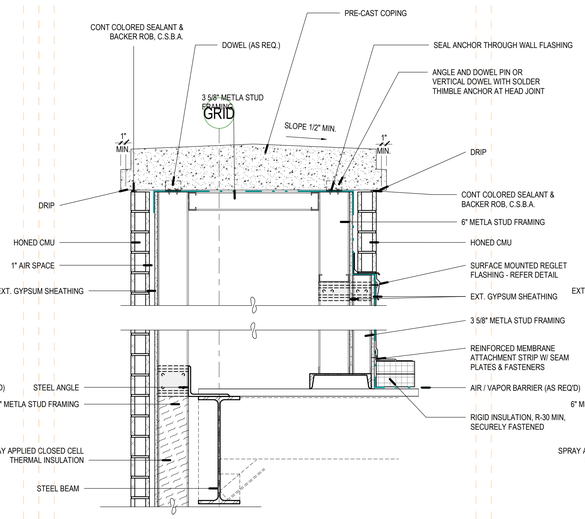
A1 PARAPET CAP @ 4" CMU + 8" CMU

SCALE: 1 1/2" = 1'-0"



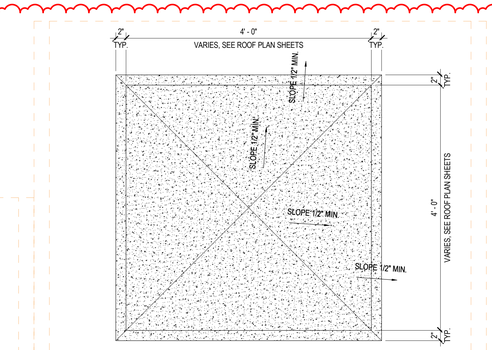
A2 PRECAST TOWER CAP W/ 4" CMU BOTH SIDES

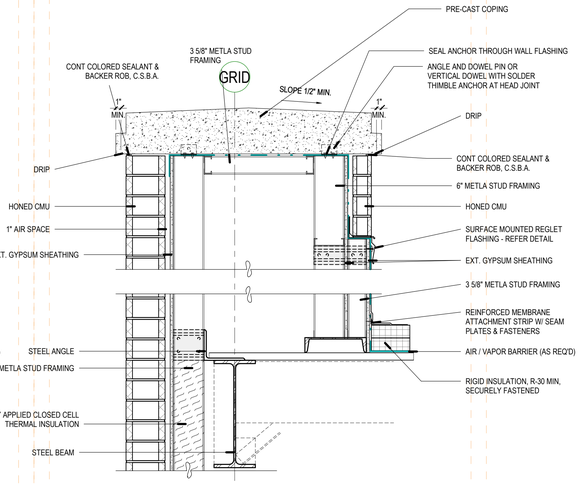
SCALE: 1" = 1'-0"



A4 PRECAST TOWER CAP W/ 4" CMU BOTH SIDES

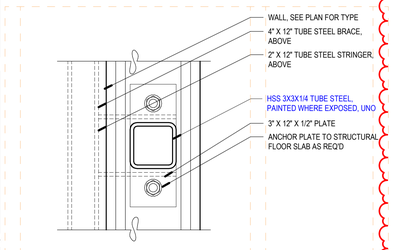
SCALE: 1" = 1'-0"





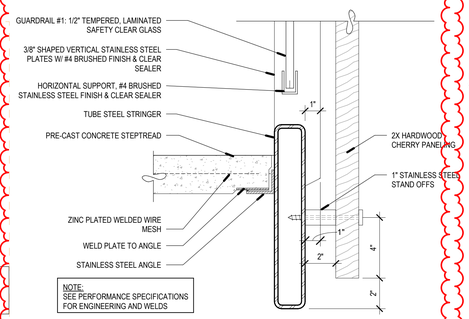
A5 TYP. PRECAST TOWER CAP DETAIL

SCALE: 1" = 1'-0"



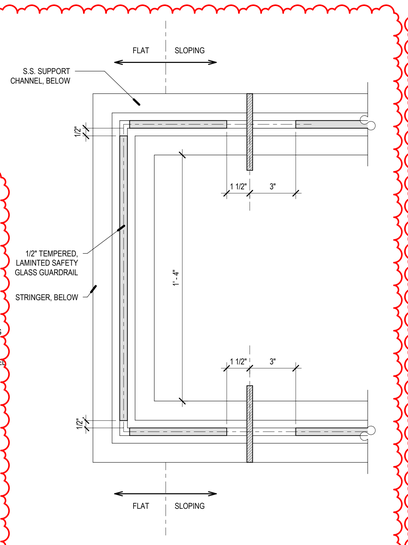
D1 COLUMN - TUBE STEEL

SCALE: 3" = 1'-0"



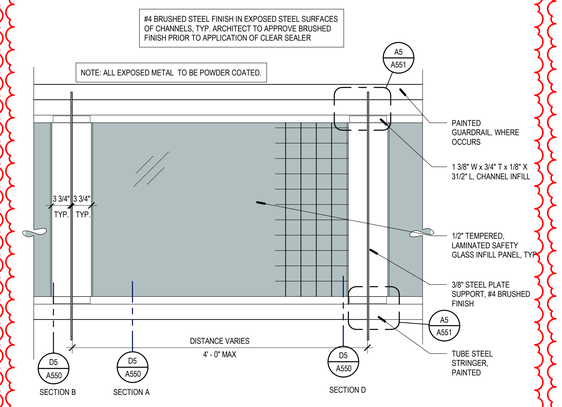
D2 TREAD/LANDING DETAIL- PRECAST - WOOD GUARDRAIL

SCALE: 3" = 1'-0"



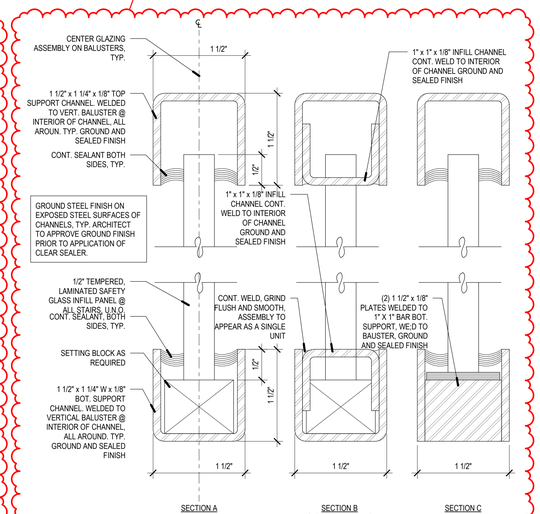
D3 GUARDRAIL CORNER AT LANDING

SCALE: 3" = 1'-0"



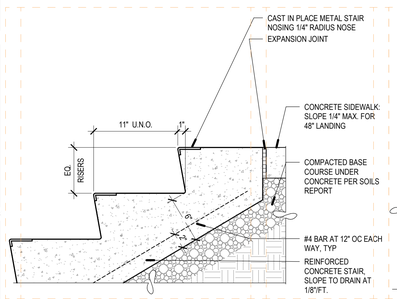
D4 INT. GUARDRAIL ELEVATION DETAIL

SCALE: 1" = 1'-0"



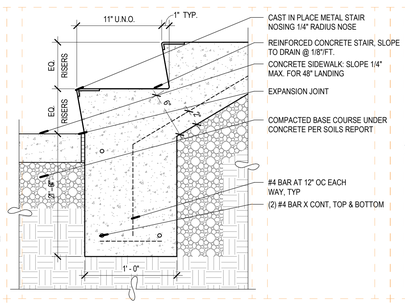
D5 INFILL PANEL DETAILS

SCALE: 1/2" = 1'-0"



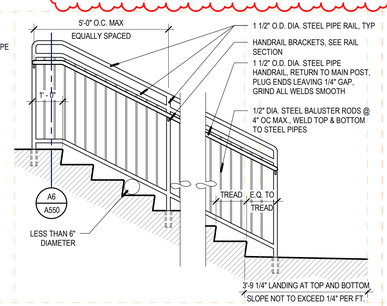
C1 STAIR - CONCRETE

A2/ A311 SCALE: 1 1/2" = 1'-0"



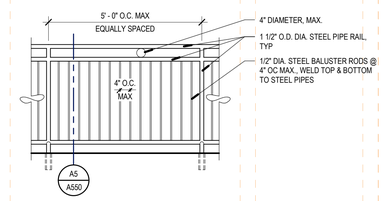
C2 STAIR - CONCRETE - BASE

A2/ A311 SCALE: 1 1/2" = 1'-0"



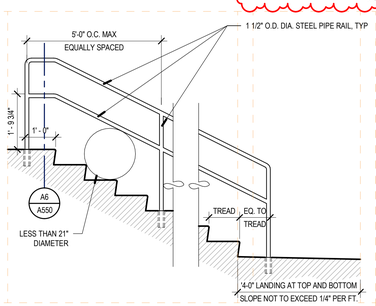
C3 GUARDRAIL - STAIR - ELEV - TYP

SCALE: 1/2" = 1'-0"



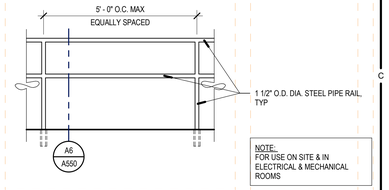
C4 GUARDRAIL - ELEV - TYP

SCALE: 1/2" = 1'-0"



C5 GUARDRAIL - STAIR - ELEV - TYP - 2

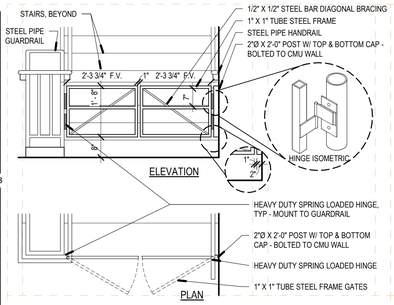
B1/ A5401 SCALE: 1/2" = 1'-0"



C6 GUARDRAIL - ELEV - TYP - 2

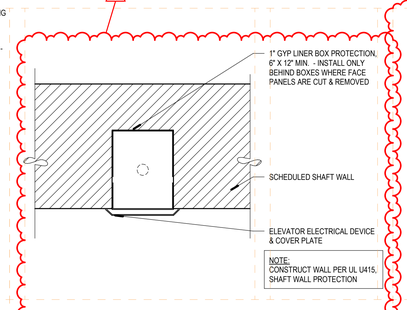
SCALE: 1/2" = 1'-0"

NOTE:
FOR USE ON SITE & IN ELECTRICAL & MECHANICAL ROOMS



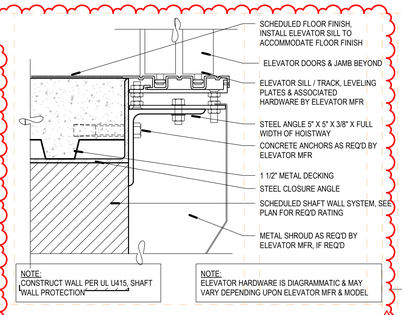
B1 STAIR - GATE

SCALE: 1/2" = 1'-0"



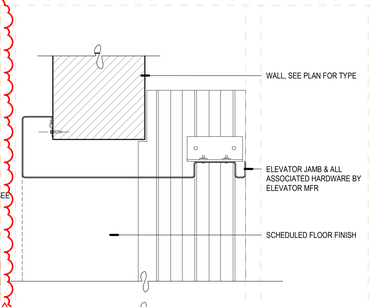
B2 ELEVATOR - ELECTRICAL DEVICE

SCALE: 3" = 1'-0"



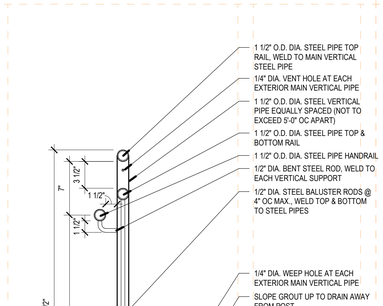
B3 ELEVATOR - SILL - SUSPENDED SLAB

SCALE: 3" = 1'-0"



B4 ELEVATOR - JAMB

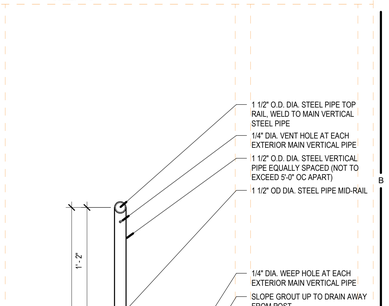
SCALE: 3" = 1'-0"



NOTES:
1. ALL PIPE MATERIAL SHALL BE SCHEDULE 40 PIPE
2. GALV STEEL TO BE USED AT EXTERIOR & AS NOTED ELSE WHERE
3. GRIND ALL WELDS SMOOTH

A5 GUARDRAIL

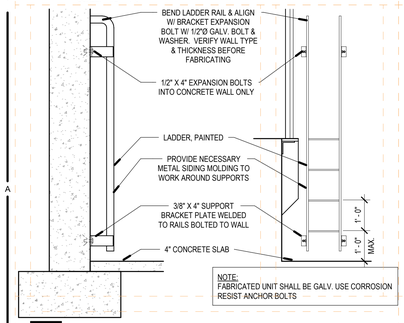
C4/ A550 SCALE: 1 1/2" = 1'-0"



NOTES:
1. FOR USE ON SITE & IN ELECTRICAL & MECHANICAL ROOMS
2. ALL PIPE MATERIAL SHALL BE SCHEDULE 40 PIPE
3. GALV STEEL TO BE USED AT EXTERIOR & AS NOTED ELSEWHERE
4. GRIND ALL WELDS SMOOTH

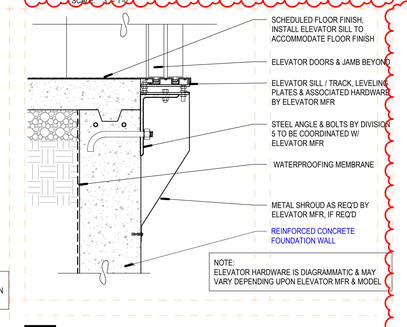
A6 GUARDRAIL - 2

C3/ A550 SCALE: 1 1/2" = 1'-0"



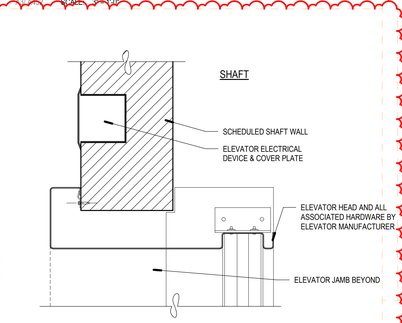
A1 PIT LADDER

A1/ A452 SCALE: 1/2" = 1'-0"



A2 ELEVATOR - SILL - SLAB ON GRADE

A3/ A452 SCALE: 1 1/2" = 1'-0"



A3 ELEVATOR - HEAD - SHAFT

A3/ A452 SCALE: 3" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH
REGISTERED
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
6	2023-08-09	RFI 01

OSD HILLCREST ELEMENTARY REBUILD

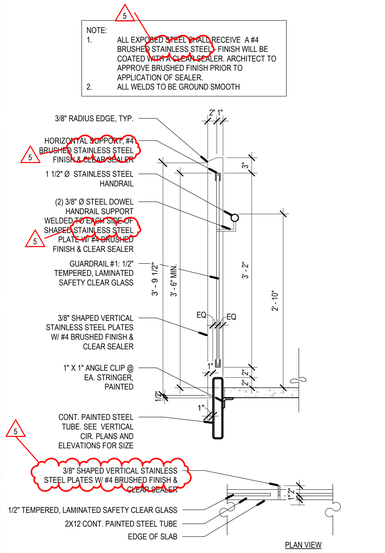
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

VERTICAL CIRCULATION DETAILS

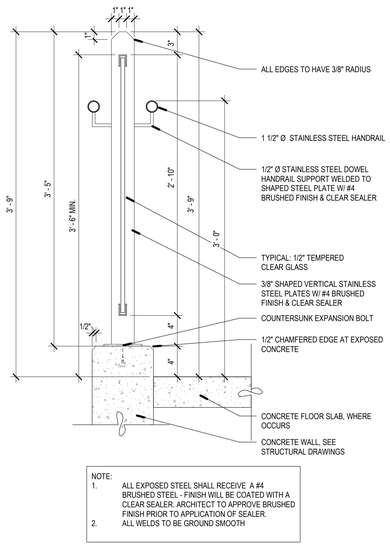
A550

11/17/2023 12:38:36 PM



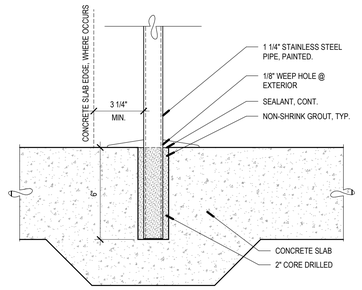
D1 TYPE 1 AND 3 GLASS GUARDRAIL DETAIL

SCALE: 1" = 1'-0"



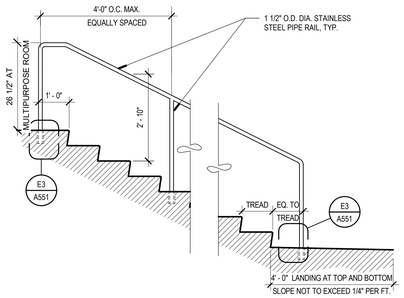
D2 TYPE 2 GLASS GUARDRAIL DETAIL

SCALE: 1 1/2" = 1'-0"



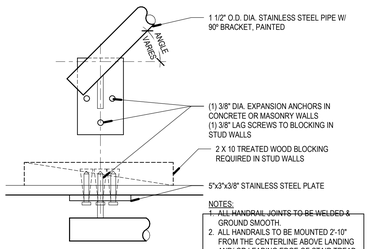
E3 TYPICAL POST SLEEVE BASE DETAIL

SCALE: 3" = 1'-0"



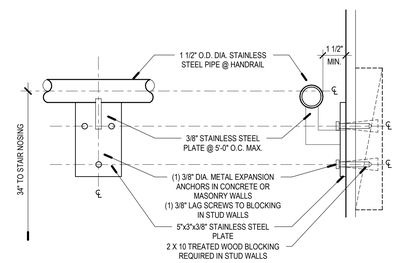
D3 TYPE 4 FREE STANDING HANDRAIL

SCALE: 1/2" = 1'-0"



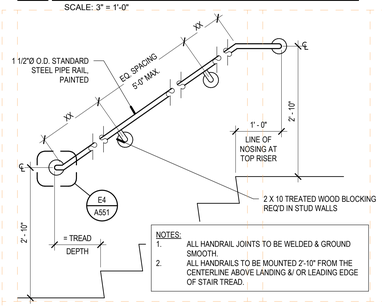
E4 STANDARD HANDRAIL TERMINATION

SCALE: 3" = 1'-0"



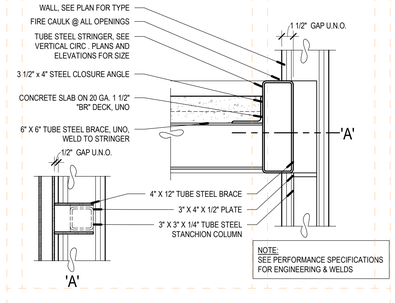
E5 STANDARD MID-RAIL DETAIL

SCALE: 3" = 1'-0"



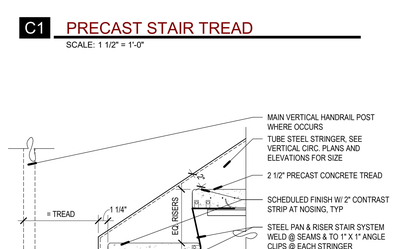
D4 TYPE 5 HANDRAIL - WALL MOUNT - ELEV

C1/ A451 SCALE: 3/4" = 1'-0"



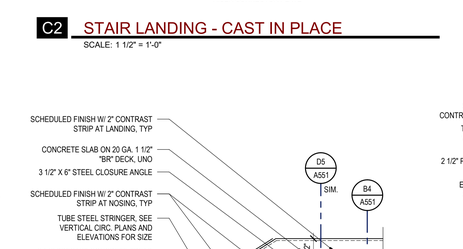
D5 LANDING SUPPORT

B2/ A551 SCALE: 1 1/2" = 1'-0"



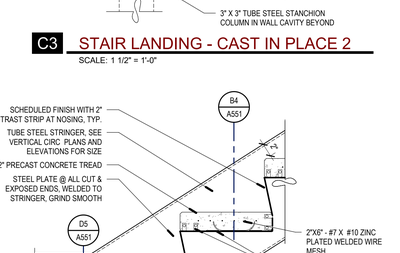
C1 PRECAST STAIR TREAD

SCALE: 1 1/2" = 1'-0"



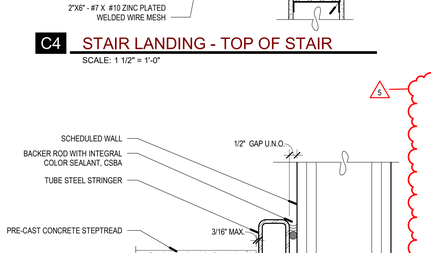
C2 STAIR LANDING - CAST IN PLACE

SCALE: 1 1/2" = 1'-0"



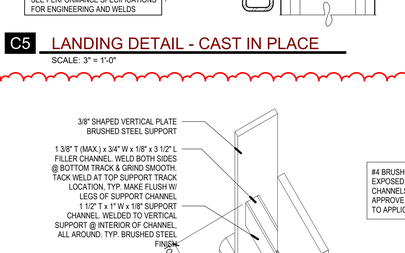
C3 STAIR LANDING - CAST IN PLACE 2

SCALE: 1 1/2" = 1'-0"



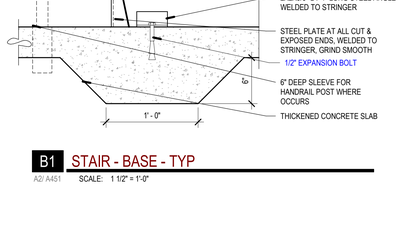
C4 STAIR LANDING - TOP OF STAIR

SCALE: 1 1/2" = 1'-0"



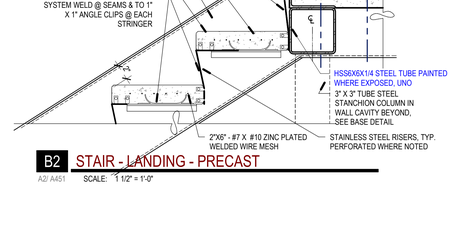
C5 LANDING DETAIL - CAST IN PLACE

SCALE: 3" = 1'-0"



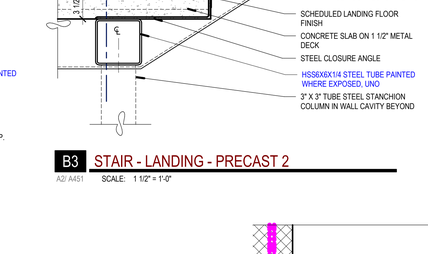
B1 STAIR - BASE - TYP

A2/ A451 SCALE: 1 1/2" = 1'-0"



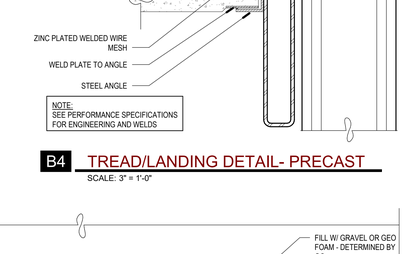
B2 STAIR - LANDING - PRECAST

A2/ A451 SCALE: 1 1/2" = 1'-0"



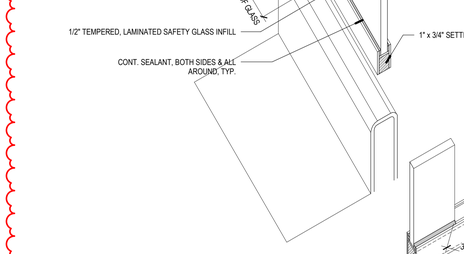
B3 STAIR - LANDING - PRECAST 2

A2/ A451 SCALE: 1 1/2" = 1'-0"



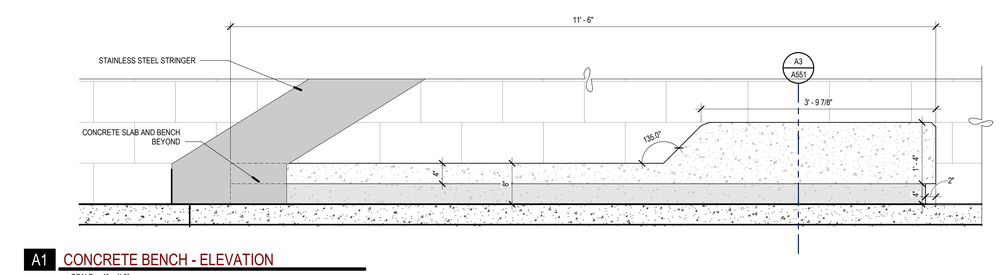
B4 TREAD/LANDING DETAIL- PRECAST

SCALE: 3" = 1'-0"



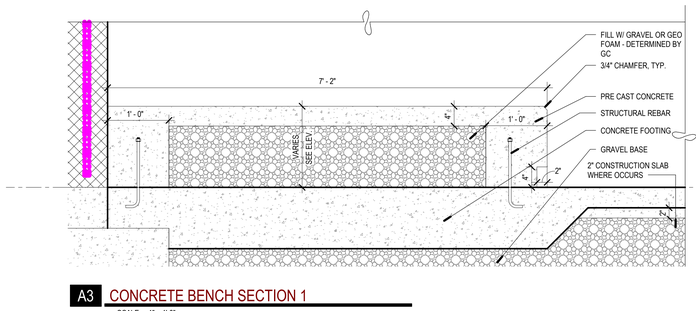
A5 TEMPERED GLASS PANEL DETAIL

SCALE: 3" = 1'-0"



A1 CONCRETE BENCH - ELEVATION

SCALE: 1" = 1'-0"



A3 CONCRETE BENCH SECTION 1

SCALE: 1" = 1'-0"

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CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — REGISTERED — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

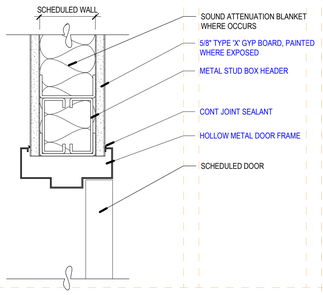
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

STANDARD VERTICAL CIRCULATION DETAILS

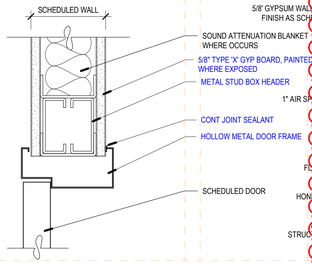
A551

11/17/2023 12:38:43 PM



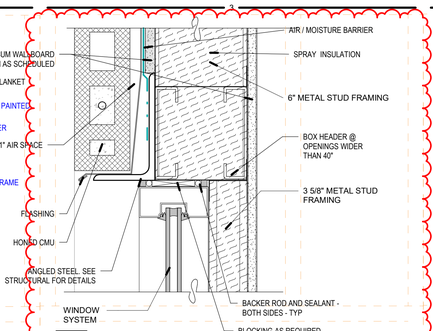
E1 HEAD - HM DOOR

SCALE: 3" = 1'-0"



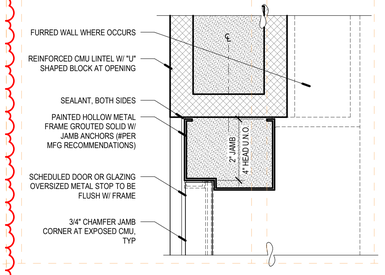
E2 HEAD - HM DOOR (SR)

SCALE: 3" = 1'-0"



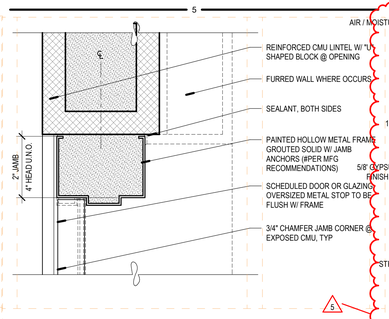
E3 HEAD - SPANDREL WINDOW @ MASONRY + STUD

SCALE: 3" = 1'-0"



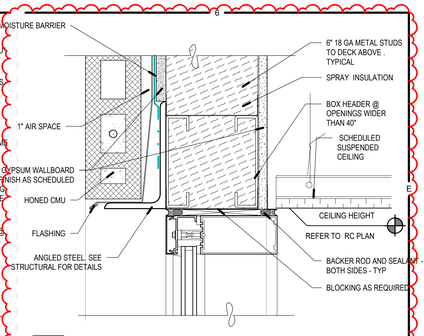
E4 HEAD - HM DOOR @ CMU (SR)

SCALE: 3" = 1'-0"



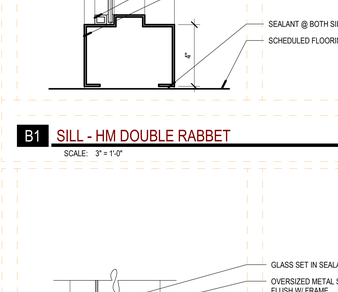
E5 HEAD - HM DOOR @ CMU

SCALE: 3" = 1'-0"



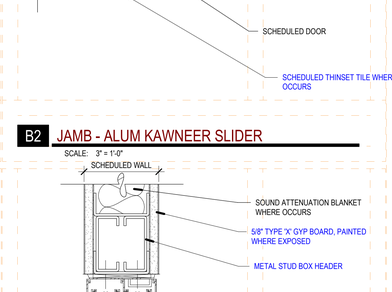
E6 HEAD - ALUM WINDOW @ MASONRY + STUD

SCALE: 3" = 1'-0"



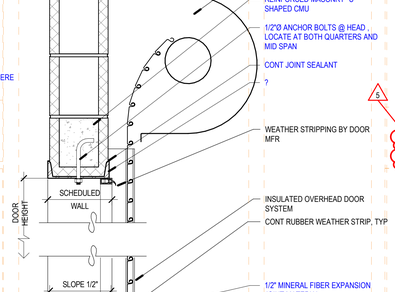
D1 TYP. HM DOOR CORNER JAMB

SCALE: 3" = 1'-0"



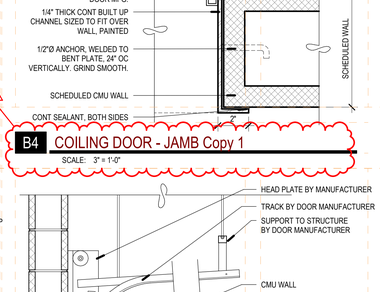
D2 JAMB - HM DOOR (SR)

SCALE: 3" = 1'-0"



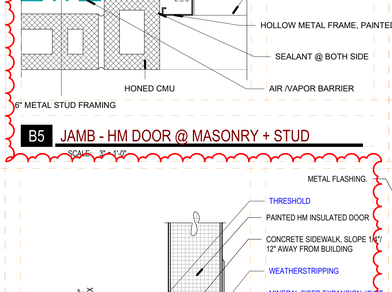
D3 JAMB - ALUM WINDOW @ MASONRY + STUD

SCALE: 3" = 1'-0"



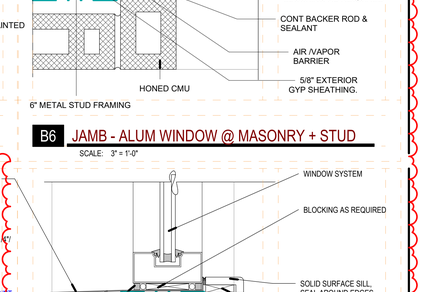
D4 JAMB - HM DOOR @ CMU + FURRED WALL (HEAD SIM. SR)

SCALE: 3" = 1'-0"



D5 JAMB - HM DOOR @ CMU + FURRED WALL (HEAD SIM.)

SCALE: 3" = 1'-0"



D6 SILL - ALUM WINDOW @ ACM PANEL + STUD

SCALE: 3" = 1'-0"

C1 JAMB - HM DOOR

SCALE: 3" = 1'-0"

C2 TYP. INTERLOCKS - ALUM KAWNEER SLIDER

SCALE: 3" = 1'-0"

C3 COILING DOOR - JAMB

SCALE: 3" = 1'-0"

C4 HM FRAME - TYP

SCALE: 3" = 1'-0"

C5 HEAD - HM DOOR @ MASONRY + STUD

SCALE: 3" = 1'-0"

C6 HEAD - ALUM WINDOW @ ACM PANEL + STUD

SCALE: 3" = 1'-0"

B1 SILL - HM DOUBLE RABBET

SCALE: 3" = 1'-0"

B2 JAMB - ALUM KAWNEER SLIDER

SCALE: 3" = 1'-0"

A3 HEAD & SILL - OVERHEAD COILING DOOR

SCALE: 1 1/2" = 1'-0"

B4 COILING DOOR - JAMB Copy 1

SCALE: 3" = 1'-0"

B5 JAMB - HM DOOR @ MASONRY + STUD

SCALE: 3" = 1'-0"

B6 JAMB - ALUM WINDOW @ MASONRY + STUD

SCALE: 3" = 1'-0"

A1 SILL - HM SINGLE RABBET

SCALE: 3" = 1'-0"

A2 HEAD & SILL - ALUM KAWNEER SLIDER

SCALE: 3" = 1'-0"

A4 sectional door

SCALE: 1" = 1'-0"

A5 TYP. EXTERIOR HM DOOR THRESHOLD

A1/ A207 SCALE: 6" = 1'-0"

A6 SILL - ALUM WINDOW @ MASONRY + STUD

SCALE: 3" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — LICENSED ARCHITECT — 7067966

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

DOOR + WINDOW DETAILS

A560

11/17/2023 12:30:44 PM

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

REV	DATE	DESCRIPTION

OGDEN SCHOOL DISTRICT

VCBO

SALT LAKE CITY, UT - HQ
ST. GEORGE, UT
LAE, HI

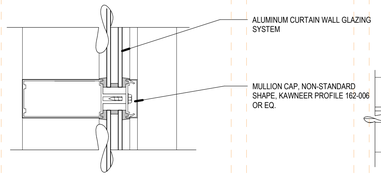
324 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.521.8900
VCBO.COM

VCBO NUMBER: 22185
CLIENT NUMBER:
DATE: NOVEMBER 08 2023

DOOR + WINDOW DETAILS

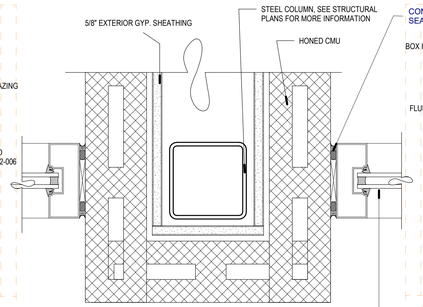
A561

11/8/2023 11:48:25 PM



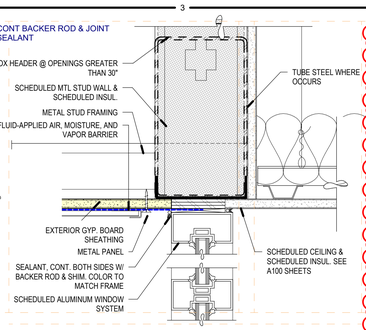
E1 7.5" CW @ INTERMEDIATE MULLION

SCALE: 3" = 1'-0"



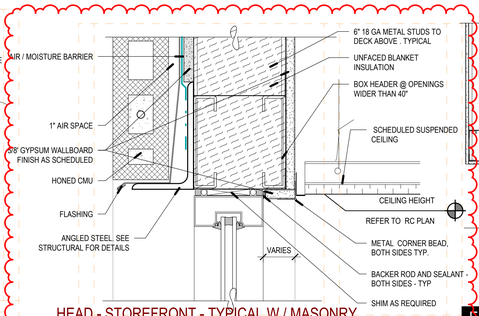
E2 JAMB - STOREFRONT @ MASONRY COLUMN WRAP

SCALE: 3" = 1'-0"



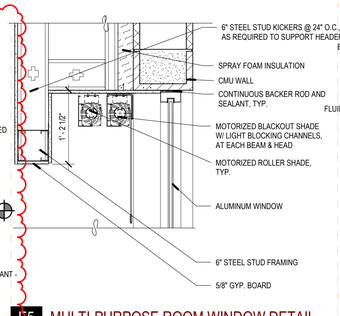
E3 HEAD - STOREFRONT @ EXTERIOR SOFFIT

SCALE: 3" = 1'-0"



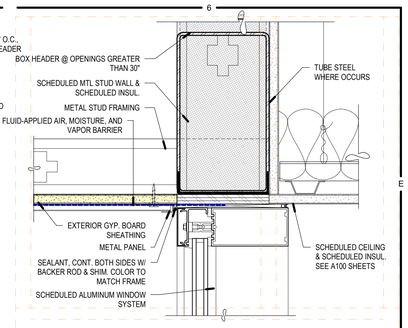
E4 HEAD - STOREFRONT - TYPICAL W / MASONRY SOLDIER COURSE

SCALE: 3" = 1'-0"



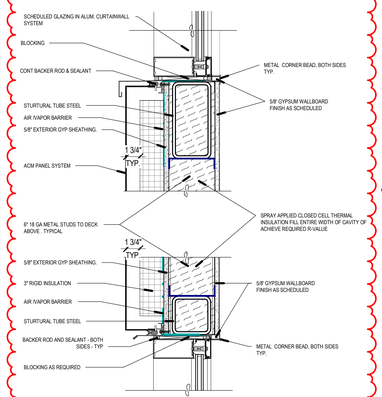
E5 MULTI-PURPOSE ROOM WINDOW DETAIL

SCALE: 1" = 1'-0"



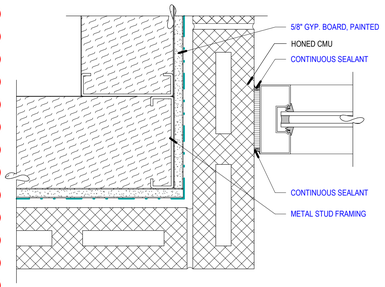
E6 HEAD - STOREFRONT @ EXTERIOR SOFFIT

SCALE: 3" = 1'-0"



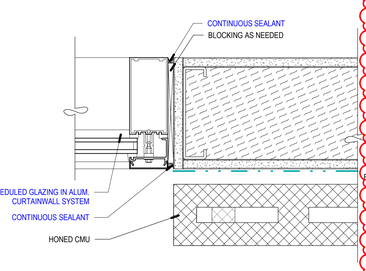
C1 HEAD AND SILL- CURTAIN WALL @ CLASSROOM WING STAIR TOWERS

SCALE: 1 1/2" = 1'-0"



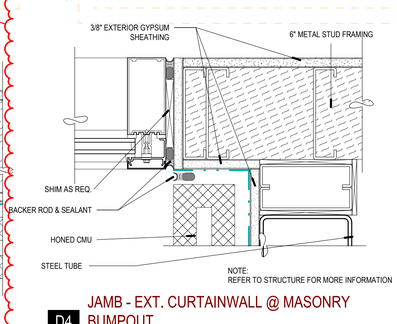
D2 JAMB - EXT. STOREFRONT @ MASONRY BUMPOUT

SCALE: 3" = 1'-0"



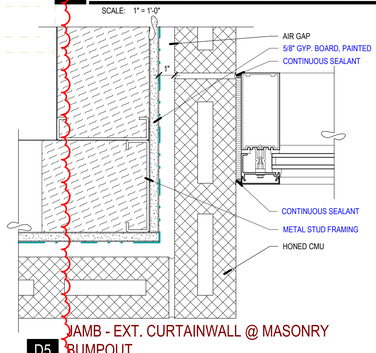
D3 JAMB - CURTAINWALL @ EXTERIOR MASONRY

SCALE: 3" = 1'-0"



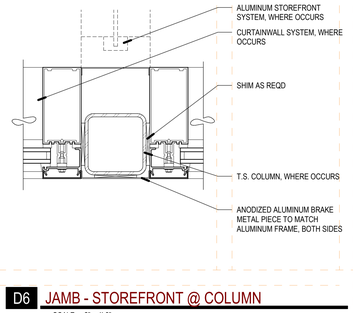
D4 JAMB - EXT. CURTAINWALL @ MASONRY BUMPOUT

SCALE: 3" = 1'-0"



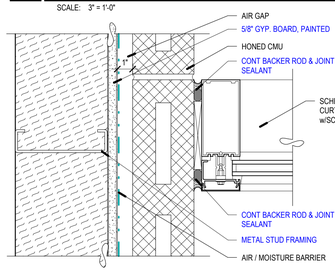
D5 JAMB - EXT. CURTAINWALL @ MASONRY BUMPOUT

SCALE: 3" = 1'-0"



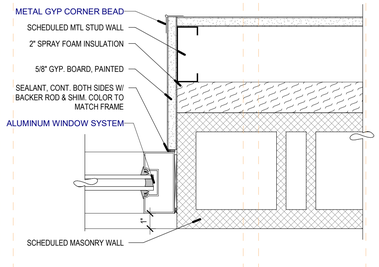
D6 JAMB - STOREFRONT @ COLUMN

SCALE: 3" = 1'-0"



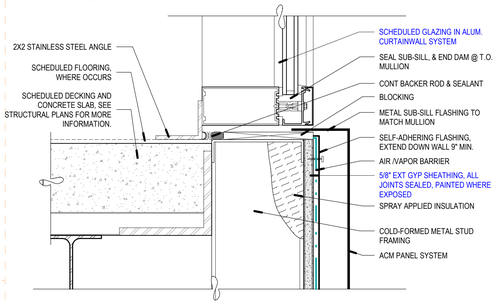
C2 JAMB - EXT. CURTAINWALL @ MASONRY BUMPOUT

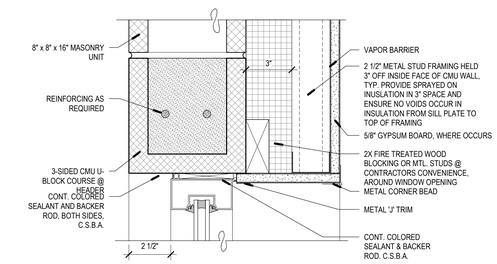
SCALE: 3" = 1'-0"

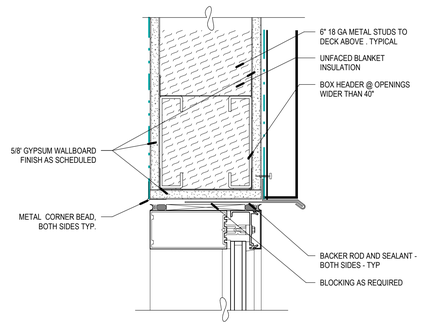


C3 JAMB - STOREFRONT @ CMU w/FURRING

SCALE: 3" = 1'-0"

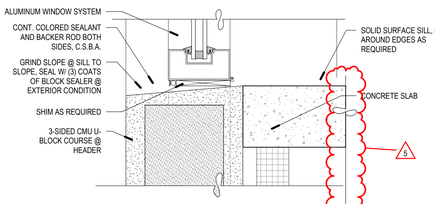






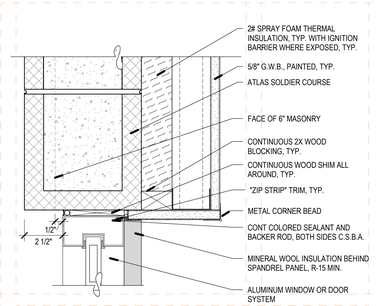
B4 HEAD & SILL - CURTAINWALL @ CLASSROOM WING STAIR TOWERS

SCALE: 3" = 1'-0"



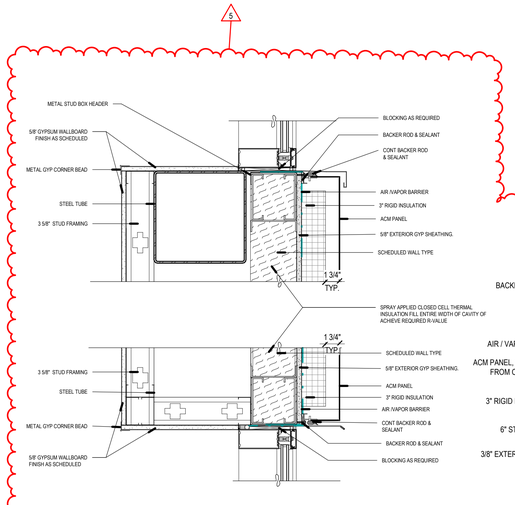
B5 HEAD & SILL - STOREFRONT @ PLATFORM/MUSIC ROOM

SCALE: 3" = 1'-0"



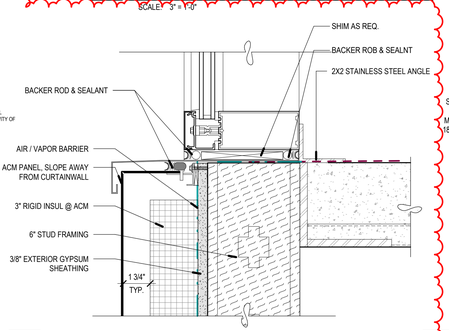
A1 HEAD - SPANDREL STOREFRONT @ CMU W/FURRING

SCALE: 3" = 1'-0"



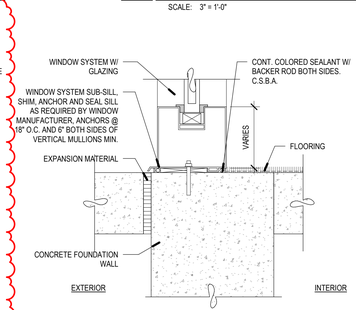
A3 HEAD & SILL - CURTAIN WALL @ REAR ENTRY VESTIBULE

SCALE: 1 1/2" = 1'-0"



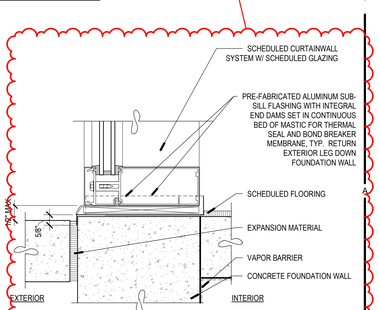
A4 SILL - CURTAINWALL @ ACM PANEL @ SLAB EDGE

SCALE: 3" = 1'-0"



A5 SILL - STOREFRONT @ FOUDNATION WALL

SCALE: 3" = 1'-0"



A6 SILL - CURTAINWALL @ FOUNDATION WALL

SCALE: 3" = 1'-0"

VCBO®

SALT LAKE CITY, UT - HQ
ST. GEORGE, UT
LAIE, HI

524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.575.6800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH
BRENDON D. SEELY
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

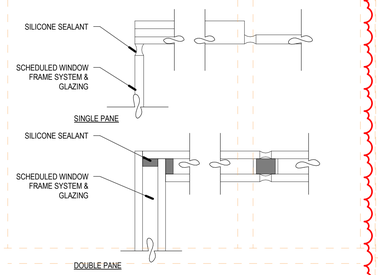
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

EXTERIOR CURTAINWALL & STOREFRONT DETAILS

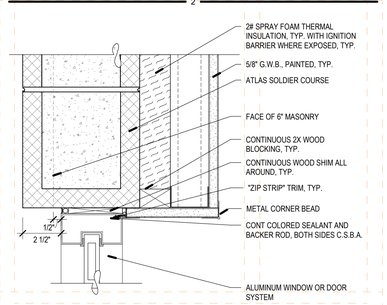
A562

11/17/2023 12:30:48 PM



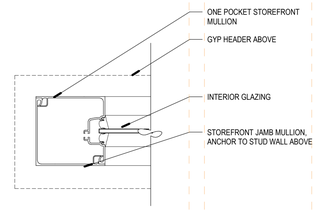
E1 JAMB - TYPICAL BUTT GLAZE SEALS

2/ A612 SCALE: 6" = 1'-0"



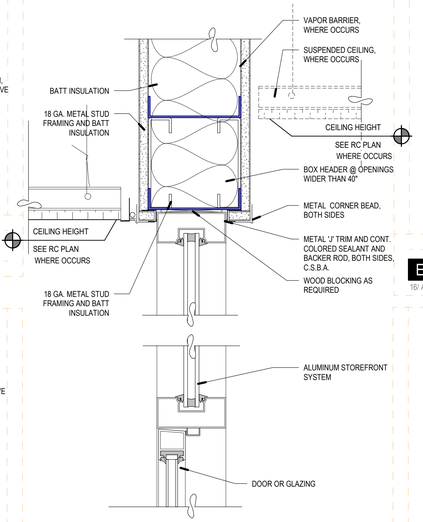
E2 HEAD - STOREFRONT @ CMU W/FURRING

SCALE: 3" = 1'-0"



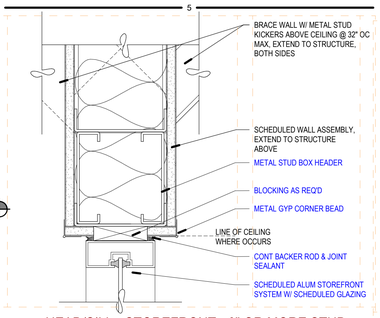
E3 JAMB - STOREFRONT @ FREE END

B5/ A610 SCALE: 3" = 1'-0"



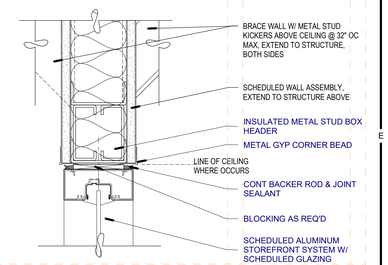
E4 HEAD - STOREFRONT @ STUD WALL W/CEILING TRANSITIONS

SCALE: 3" = 1'-0"



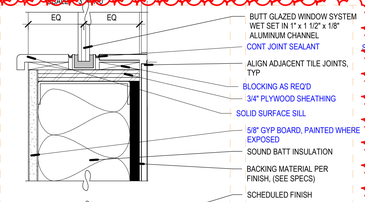
E5 HEAD/SILL - STOREFRONT - 6" OR MORE STUD WALL

16/ A611 SCALE: 3" = 1'-0"



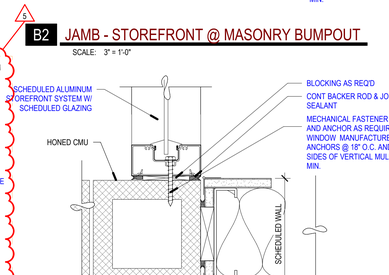
E6 HEAD - INTERIOR STOREFRONT

SCALE: 3" = 1'-0"



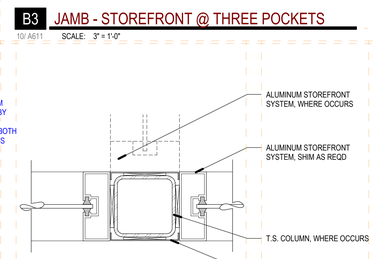
D1 BUTT GLAZING SILL CONDITIONS

SCALE: 3" = 1'-0"



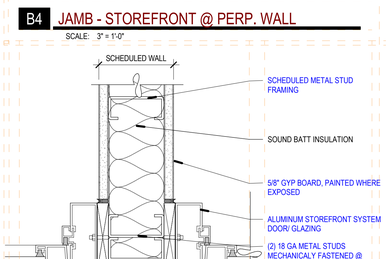
D2 JAMB - STOREFRONT @ CMU w/FURRING

SCALE: 3" = 1'-0"



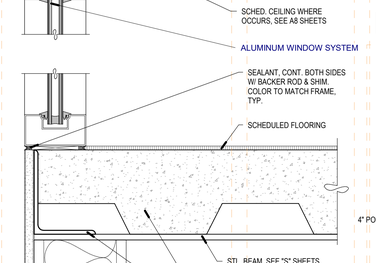
D3 JAMB - STOREFRONT @ TWO POCKET AND STUD WALL

4/ A610 SCALE: 3" = 1'-0"



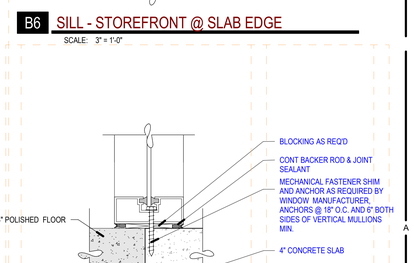
D4 HEAD - STOREFRONT @ STUD WALL W/CEILING TRANSITIONS

SCALE: 3" = 1'-0"



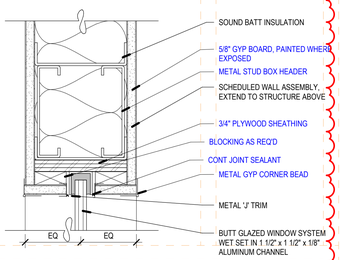
D5 JAMB - STOREFRONT - 6" OR MORE STUD WALL

B5/ A610 SCALE: 3" = 1'-0"



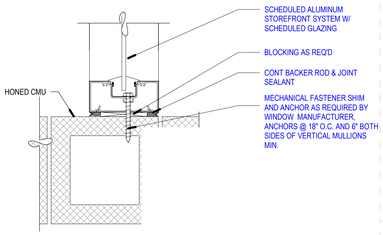
D6 JAMB - INTERIOR STOREFRONT

SCALE: 3" = 1'-0"



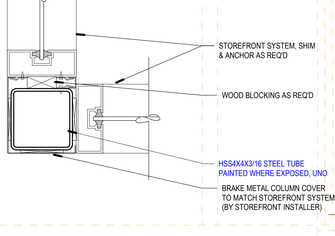
C1 HEAD - BUTT GLAZE - THIN ALUM. FRAME

1/ A612 SCALE: 3" = 1'-0"



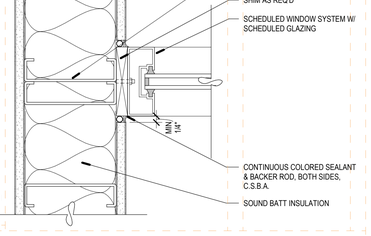
C2 JAMB - STOREFRONT @ PERP. TO MASONRY WALL

SCALE: 3" = 1'-0"



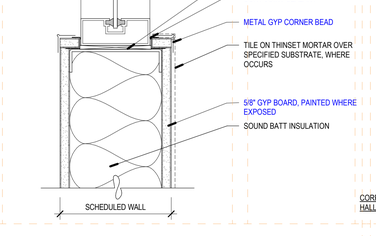
C3 JAMB - STOREFRONT @ CORNER COLUMN

SCALE: 3" = 1'-0"



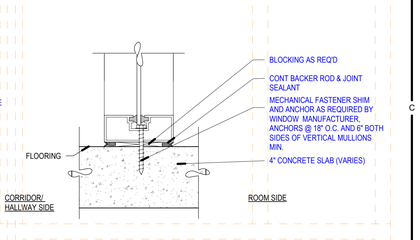
C4 JAMB - STOREFRONT @ PERP. TO STUD WALL

SCALE: 3" = 1'-0"



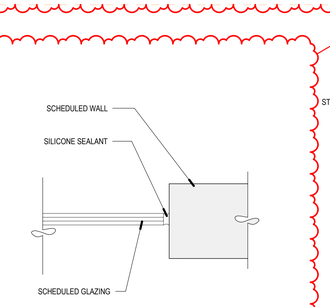
C5 SILL - INTERIOR STOREFRONT

SCALE: 3" = 1'-0"



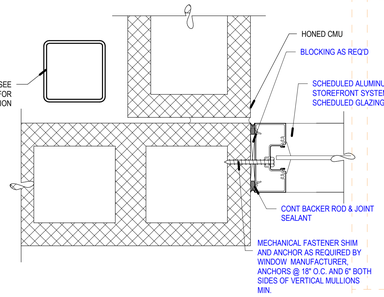
C6 SILL - STOREFRONT @ SLAB

1/ A612 SCALE: 3" = 1'-0"



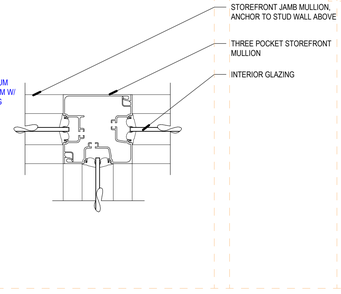
B1 BUTT GLAZED THIN ALUM. FRAME JAMB

SCALE: 3" = 1'-0"



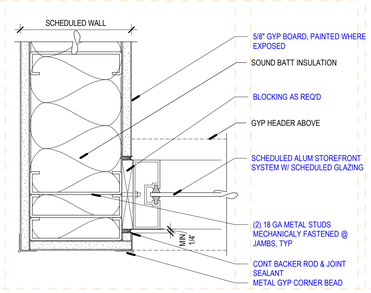
B2 JAMB - STOREFRONT @ MASONRY BUMPOUT

SCALE: 3" = 1'-0"



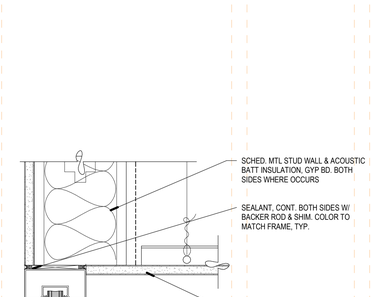
B3 JAMB - STOREFRONT @ THREE POCKETS

10/ A611 SCALE: 3" = 1'-0"



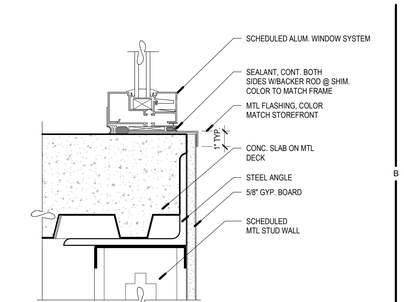
B4 JAMB - STOREFRONT @ PERP. WALL

SCALE: 3" = 1'-0"



TYPICAL ALUM. WINDOW HEAD & SILL @ SLAB EDGE

SCALE: 3" = 1'-0"



B6 SILL - STOREFRONT @ SLAB EDGE

SCALE: 3" = 1'-0"

A1 SILL - BUTT GLAZE - THIN ALUM. FRAME

4/ A612 SCALE: 3" = 1'-0"

A2 JAMB - STOREFRONT @ MASONRY TO STUD TRANSITION

SCALE: 3" = 1'-0"

A3 JAMB - STOREFRONT @ COLUMN

SCALE: 3" = 1'-0"

A4 JAMB - STOREFRONT @ PENETRATING WALL

SCALE: 3" = 1'-0"

A5 TYPICAL ALUM. WINDOW HEAD & SILL @ SLAB EDGE

SCALE: 3" = 1'-0"

A6 SILL - STOREFRONT @ SLAB TO SLAB TRANSITION

SCALE: 3" = 1'-0"

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STATE OF UTAH — CHERYL C. HOPE — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

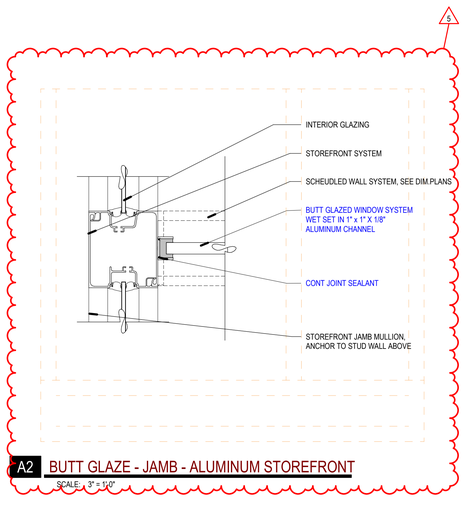
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

INTERIOR STOREFRONT AND BUTT GLAZING DETAILS

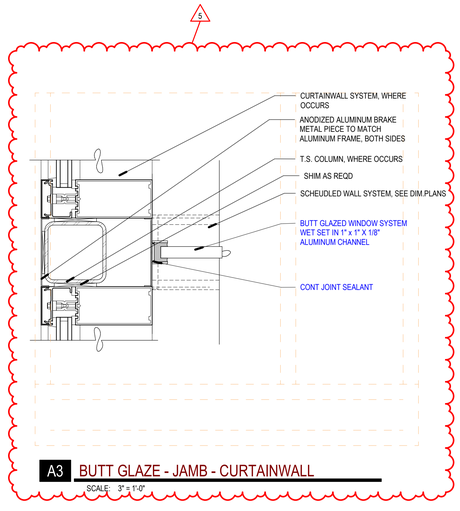
A563

11/17/2023 12:30:53 PM



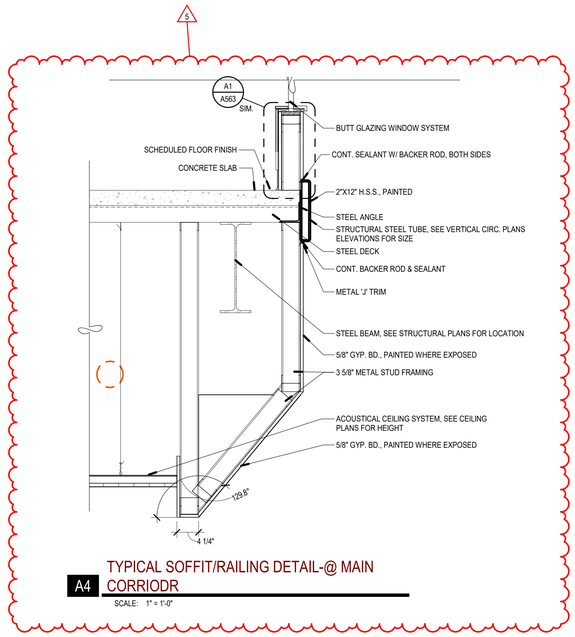
A2 BUTT GLAZE - JAMB - ALUMINUM STOREFRONT

SCALE: 3" = 1'-0"



A3 BUTT GLAZE - JAMB - CURTAINWALL

SCALE: 3" = 1'-0"



A4 TYPICAL SOFFIT/RAILING DETAIL-@ MAIN CORRIODR

SCALE: 1" = 1'-0"

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OGDEN SCHOOL DISTRICT

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OSD HILLCREST ELEMENTARY REBUILD

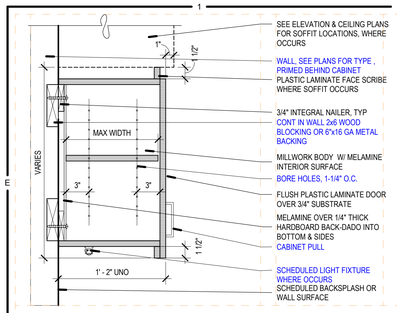
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

BUTT GLAZING DETAILS

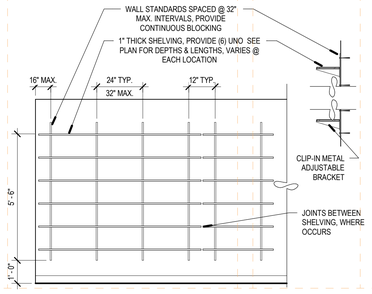
A564

11/17/2023 12:30:56 PM



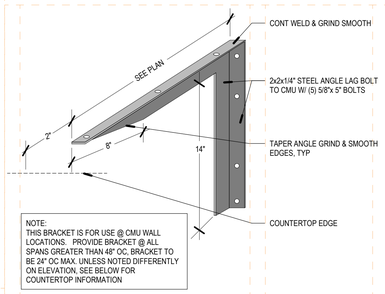
E1 UPPER CABINET - FULL DOOR

A3/ A402 SCALE: 1 1/2" = 1'-0"



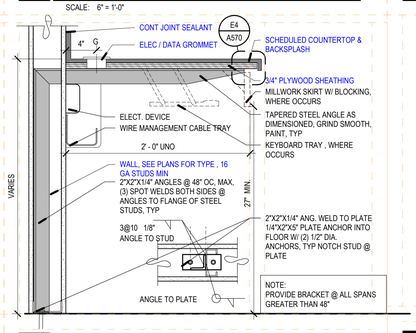
E2 LOCK - TYP

A2/ A570 SCALE: 6" = 1'-0"



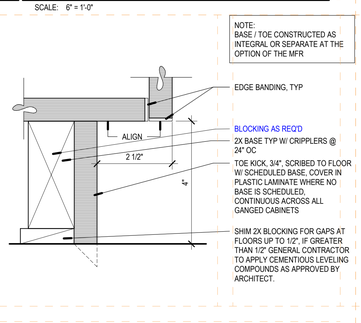
E3 COUNTER EDGE - PLASTIC LAMINATE

SCALE: 6" = 1'-0"



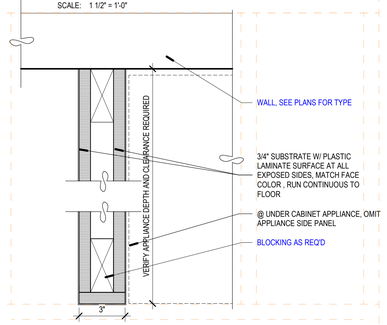
E4 COUNTER EDGE - SOLID SURFACE

SCALE: 6" = 1'-0"



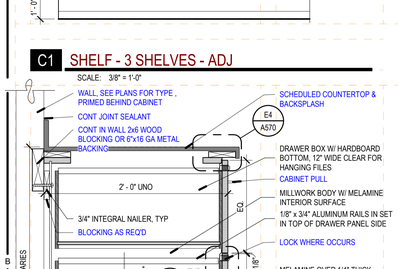
E5 BASE CABINET @ OPEN

SCALE: 1 1/2" = 1'-0"



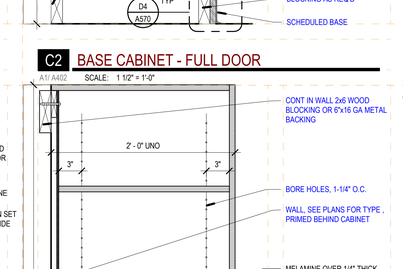
D1 SHELF - FULL HEIGHT - ADJ

A1/ A121.1 SCALE: 3/8" = 1'-0"



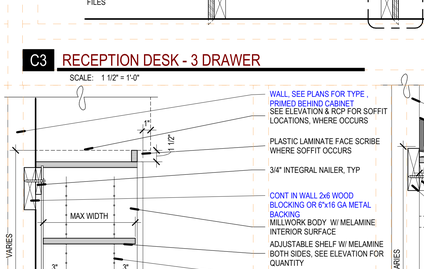
D2 COUNTER - SUPPORT - CMU

SCALE: 1 1/2" = 1'-0"



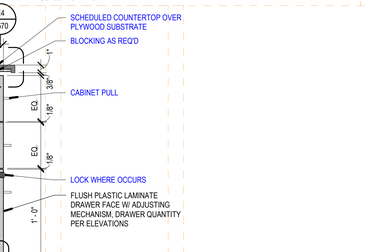
D3 COUNTER - WALL HUNG

SCALE: 1 1/2" = 1'-0"



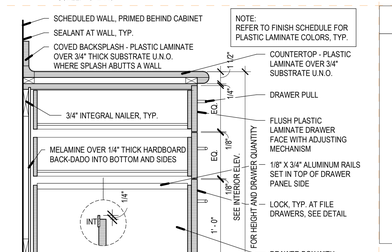
D4 TOE KICK - TYP

A1/ A570 SCALE: 6" = 1'-0"



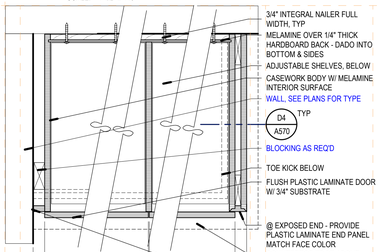
D5 BASE CABINET - END PANEL - PLAN

SCALE: 3" = 1'-0"



D6 UPPER OPEN MULTIPLE SHELF CABINET

SCALE: 1 1/2" = 1'-0"

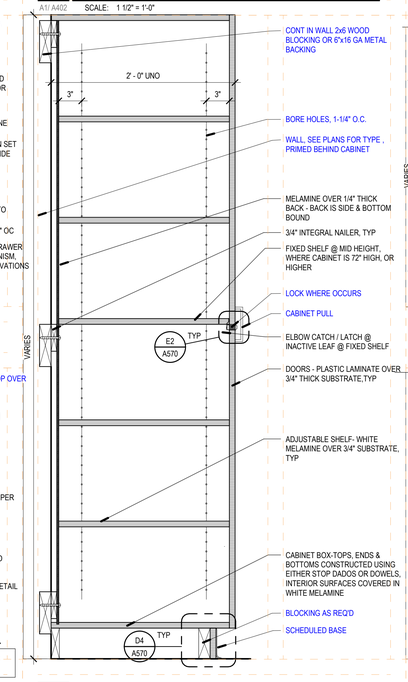


C1 SHELF - 3 SHELVES - ADJ

SCALE: 3/8" = 1'-0"

C2 BASE CABINET - FULL DOOR

A1/ A402 SCALE: 1 1/2" = 1'-0"

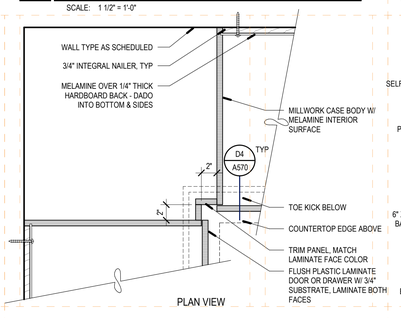


C3 RECEPTION DESK - 3 DRAWER

SCALE: 1 1/2" = 1'-0"

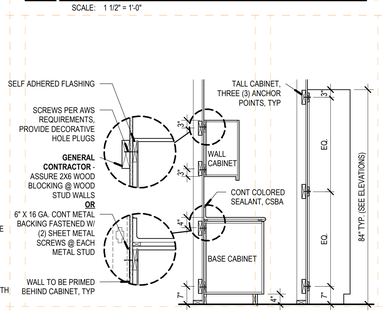
C5 BASE CABINET @ BOTTOM FILE DRAWER

SCALE: 1 1/2" = 1'-0"



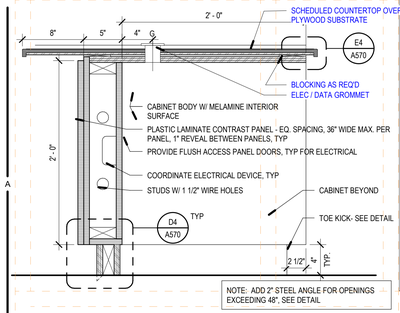
C6 BASE CABINET - PLAN

SCALE: 1 1/2" = 1'-0"



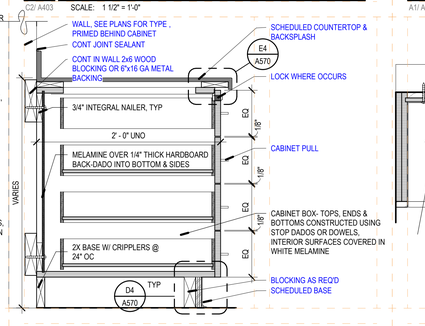
B1 BASE CABINET - FILE DRAWER

SCALE: 1 1/2" = 1'-0"



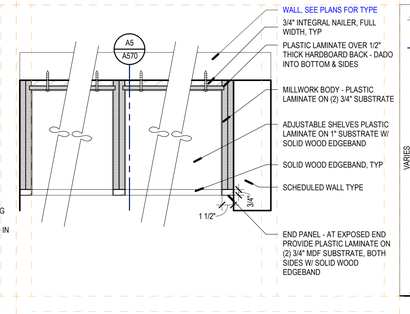
B3 UPPER CABINET - OPEN

C2/ A403 SCALE: 1 1/2" = 1'-0"



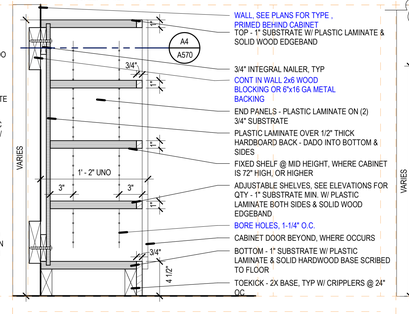
B4 BASE CABINET - SINK

A1/ A402 SCALE: 1 1/2" = 1'-0"



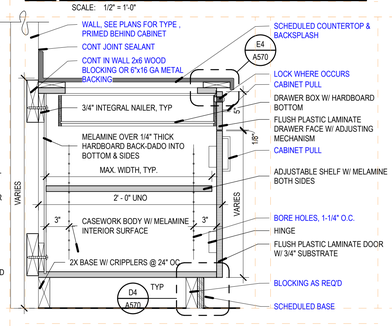
B5 BASE CABINET - CORNER

SCALE: 1 1/2" = 1'-0"



B6 MILLWORK ANCHOR - TYP

SCALE: 1/2" = 1'-0"



A1 RECEPTION DESK - OPEN SPACE

SCALE: 1 1/2" = 1'-0"

A2 TALL CABINET

A1/ A402 SCALE: 1 1/2" = 1'-0"

A3 BASE CABINET - 4 DRAWER

B1/ A402 SCALE: 1 1/2" = 1'-0"

A4 BOOKSHELF - PLAN

A5/ A570 SCALE: 1 1/2" = 1'-0"

A5 BOOKSHELF

C4/ A409 SCALE: 1 1/2" = 1'-0"

A6 BASE CABINET - DRAWER AND DOOR

A3/ A402 SCALE: 1 1/2" = 1'-0"

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REV	DATE	DESCRIPTION

OGDEN SCHOOL DISTRICT

OSD HILLCREST ELEMENTARY REBUILD

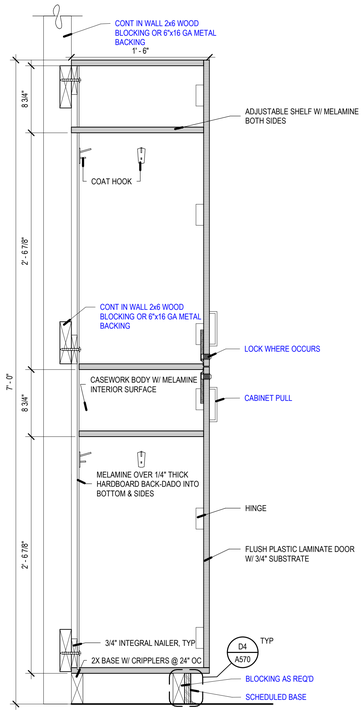
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

CASEWORK DETAILS

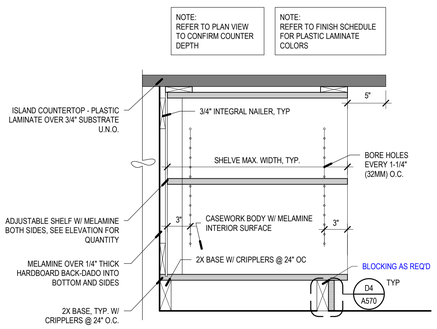
A570

11/8/2023 10:48:47 PM



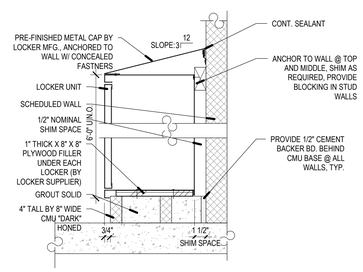
C1 2 TIER LOCKER

SCALE: 1 1/2" = 1'-0"



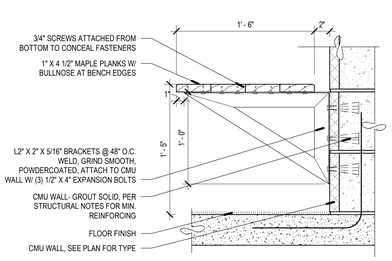
B1 BASE CABINET @ TEACHER COLLABORATION

SCALE: 1 1/2" = 1'-0"



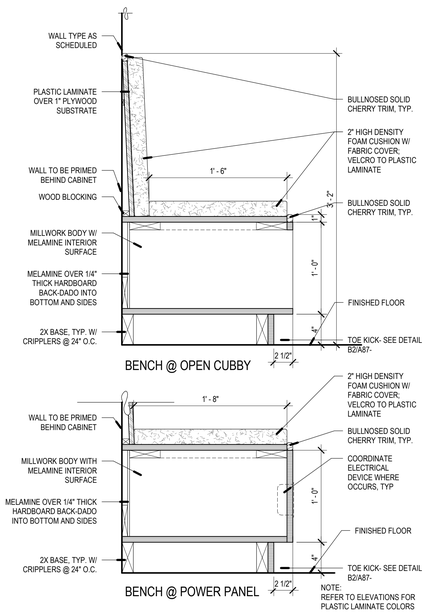
A1 LOCKER W/ BASE - TYP.

SCALE: 1 1/2" = 1'-0"



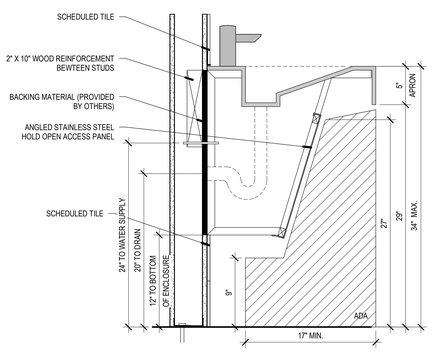
A2 BENCH DETAIL - WALL MOUNTED

SCALE: 1 1/2" = 1'-0"



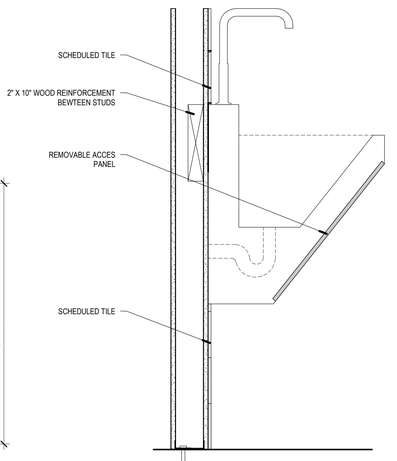
A3 TYP. BENCH @ CLASSROOM SECTION

SCALE: 1 1/2" = 1'-0"



A4 COUNTER - WALL HUNG MULTI-STATION SINK

SCALE: 1 1/2" = 1'-0"



A5 COUNTER - WALL HUNG MULTI-STATION SCRUB SINK

SCALE: 1 1/2" = 1'-0"

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REGISTERED
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LICENSED ARCHITECT

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OSD HILLCREST ELEMENTARY REBUILD

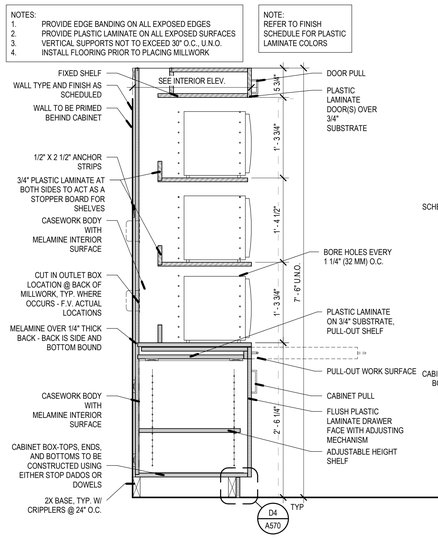
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

CASEWORK DETAILS

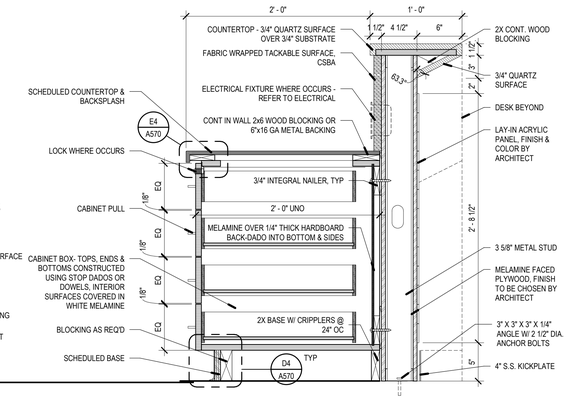
A571

11/8/2023 10:48:51 PM



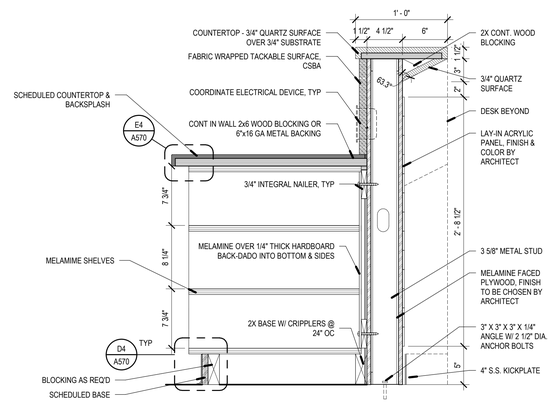
D4 MICROWAVE COOKING STATION

SCALE: 1" = 1'-0"



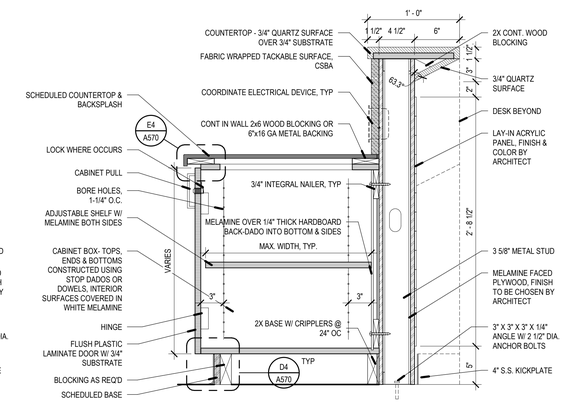
D5 BASE CABINET - 4 DRAWER @ MEDIA CENTER DESK

SCALE: 1 1/2" = 1'-0"



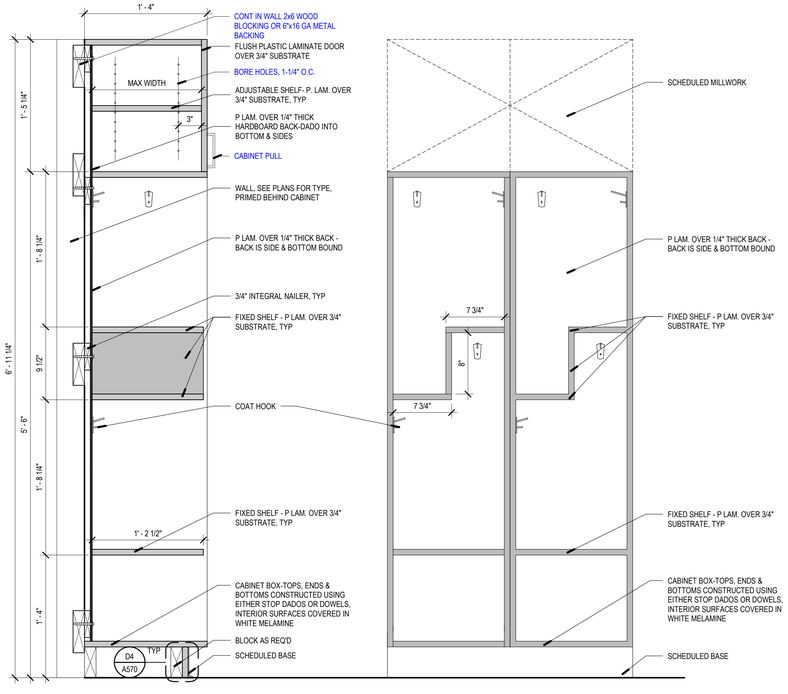
C4 BASE CABINET -SHELVES @ MEDIA CENTER DESK

SCALE: 1 1/2" = 1'-0"



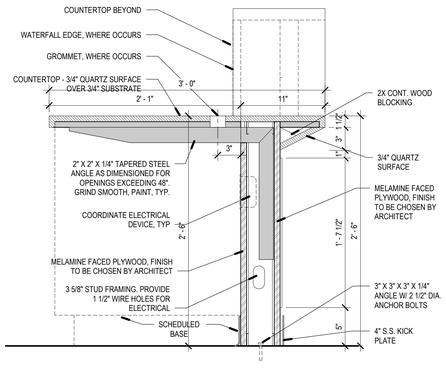
C5 BASE CABINET - FULL DOOR @ MEDIA CENTER DESK

SCALE: 1 1/2" = 1'-0"



A2 TALL CABINET - OPEN CUBBIES

SCALE: 1 1/2" = 1'-0"



A4 BASE CABINET - OPEN SPACE @ MEDIA CENTER DESK

SCALE: 1 1/2" = 1'-0"

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OSD HILLCREST ELEMENTARY REBUILD

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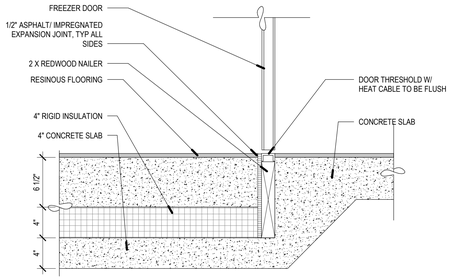
BID PACKAGE 5 - GENERAL CONSTRUCTION

CASEWORK DETAILS - CUSTOM

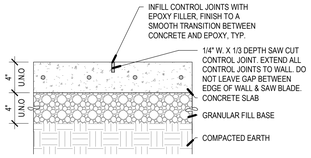
A572

11/8/2023 10:48:05 PM



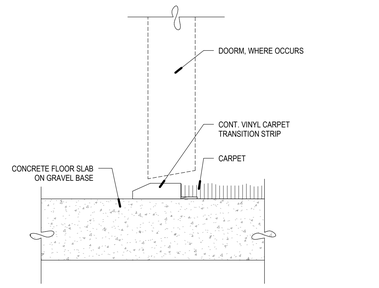
D1 WALK IN FREEZER DOOR

SCALE: 1 1/2" = 1'-0"



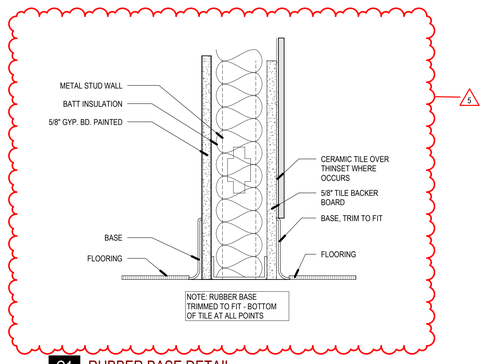
D2 TYP.CONCRETE SAW CUT DETAIL WITH EPOXY FILLER

SCALE: 1 1/2" = 1'-0"



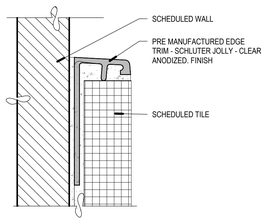
D3 CONCRETE TO CARPET FLOOR TRANSITION DETAIL TYP.

SCALE: 6" = 1'-0"



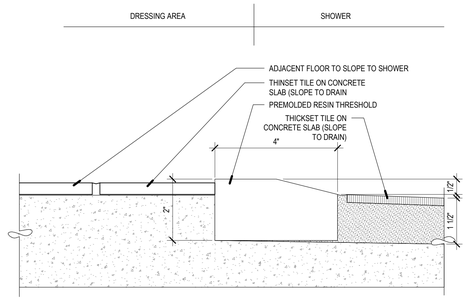
C1 RUBBER BASE DETAIL

SCALE: 3" = 1'-0"



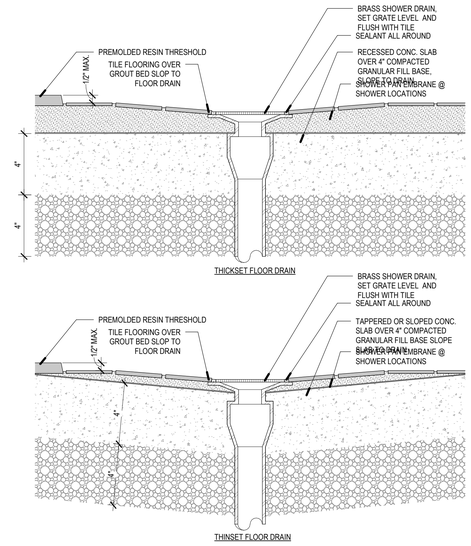
C2 TYPICAL EXPOSED TILE EDGE DETAIL

SCALE: 1" = 1'-0"



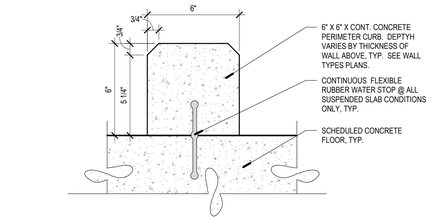
C3 TYPICAL H.C. SHOWER THRESHOLD DETAIL

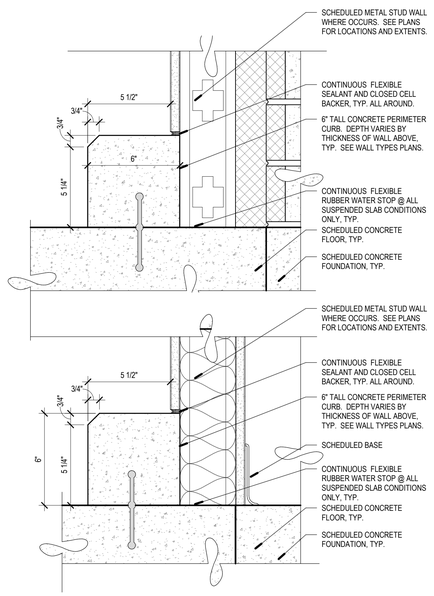
SCALE: 6" = 1'-0"



C4 TYPICAL DRAIN DETAIL

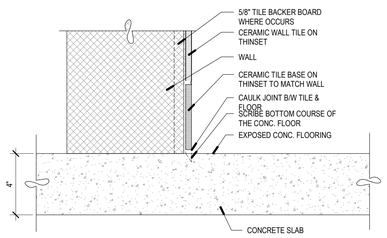
SCALE: 3" = 1'-0"





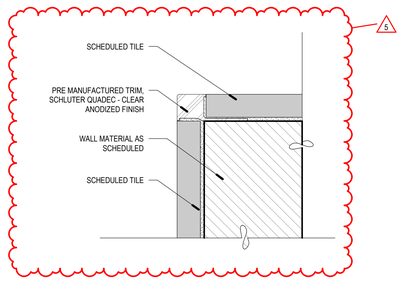
A1 CONCRETE CURB - MECHANICAL

SCALE: 3" = 1'-0"



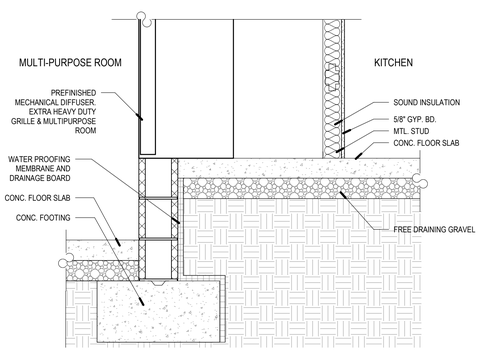
A2 TYPE TILE BASE DETAIL

SCALE: 3" = 1'-0"



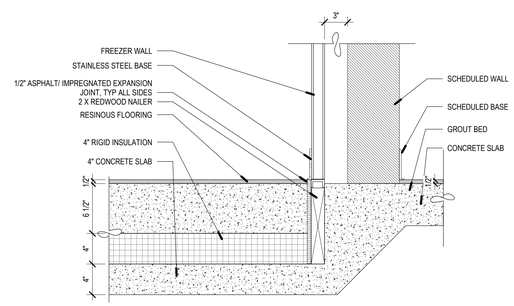
B3 TYPICAL TILE OUTSIDE CORNER DETAIL

SCALE: 12" = 1'-0"



A3 SILL DETAIL @ MULTIPUPOSE ROOM IN-WALL DIFFUSER

SCALE: 1" = 1'-0"



A5 WALK IN FREEZER @ WALL

SCALE: 1 1/2" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH — JOSEPH SHEEHAN — 7067068 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

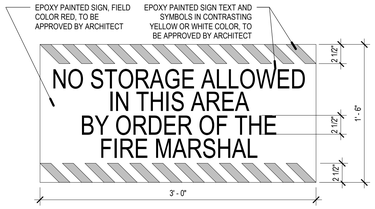
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

FLOOR + BASE DETAILS

A573

11/17/2023 12:31:03 PM



NOTE: PAINT NOTICE ON FLOOR WITHIN ALL MECHANICAL, FAN, ELECTRICAL, AND FIRE-RISER ROOMS

1 PAINTED NOTICE DETAIL

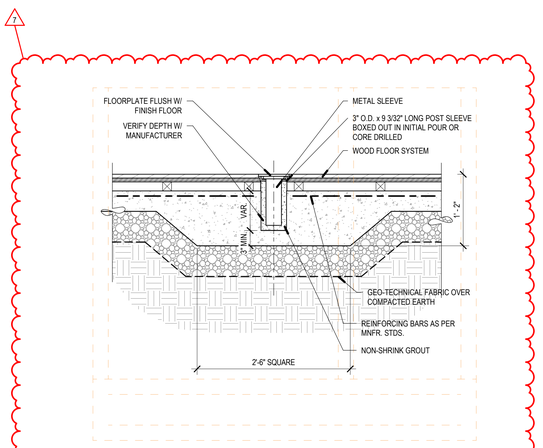
SCALE: 1 1/2" = 1'-0"

B1 FLOOR GRATE DETAIL

SCALE: 3" = 1'-0"

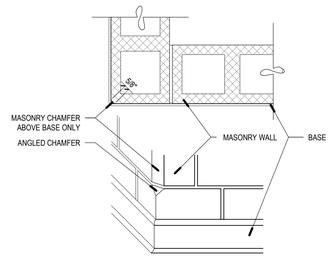
B2 TYPICAL CONCRETE CURB @ MECHANICAL ROOM

SCALE: 1 1/2" = 1'-0"



B3 VOLLEYBALL FLOOR INSERT

SCALE: 1" = 1'-0"

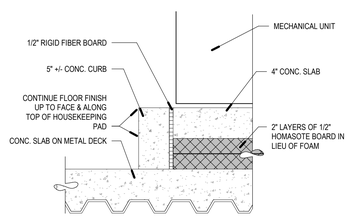


NOTE: 5/8" CHAMFER TYPICAL @ ALL MASONRY VERTICAL EDGES THROUGHT BUILDING

TERMINATE CHAMFER 1 BLOCK COURSE BELOW CEILING LINE

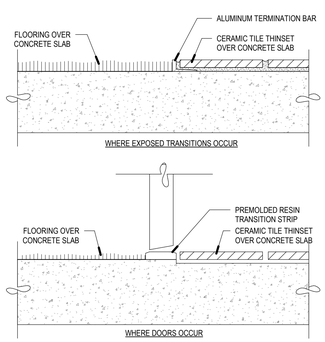
B5 TYPICAL MASONRY CORNER DETAIL

SCALE: 1 1/2" = 1'-0"



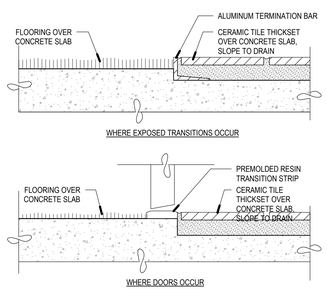
A1 TYPICAL MECHANICAL HOUSEKEEPING PAD

SCALE: 1 1/2" = 1'-0"



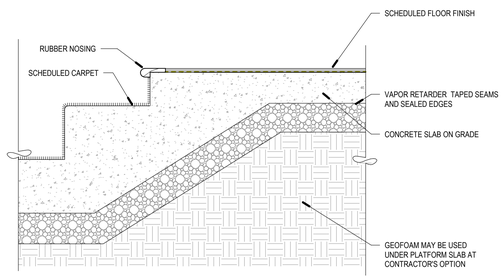
A2 TYP. TILE TRANSITION (THINSET)

SCALE: 3" = 1'-0"



A3 TYP. TILE TRANSITION (THICKSET)

SCALE: 3" = 1'-0"



A5 RUBBER PLATFORM FLOOR DETAIL @ STAIR

SCALE: 1 1/2" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH
BRENT P. SHEFFIELD
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

FLOOR + BASE DETAILS

A574

11/27/2023 12:43:42 PM

DOOR AND FRAME SCHEDULE

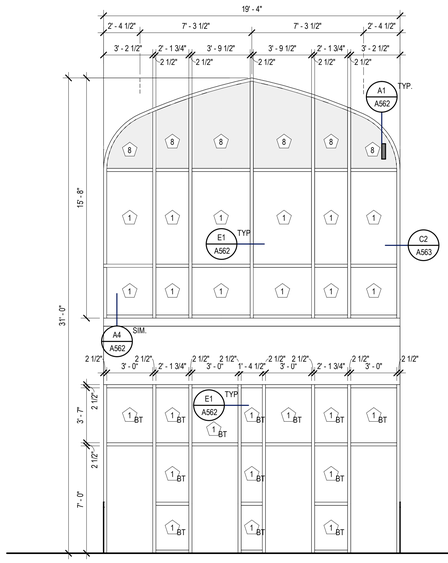
DOOR NUMBER	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THICK	DOOR ELEV. TYPE	DOOR MATERIAL	DOOR FINISH/ FACING	FRAME ELEV. TYPE	FRAME MATERIAL	FRAME FINISH/ FACING	HARD WARE GROUP	GLAZING TYPE	LABLE (MIN.)	NOTES	DOOR NUMBER
1100A	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A01	-	-	MAG HOLDS, FILM ON DOOR GLASS	1100A
1100B	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A01	-	-	MAG HOLDS, FILM ON DOOR GLASS	1100B
1100C	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A01	-	-	MAG HOLDS, SAFETY FILM ON DOOR GLASS	1100C
1100D	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A02	-	-	CARDREADER, SAFETY FILM ON DOOR GLASS, ADA ACTUATOR	1100D
1100E	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A05	-	-	CARDREADER, SAFETY FILM ON DOOR GLASS, ADA ACTUATOR	1100E
1100F	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04	-	-	MAG HOLDS, SAFETY FILM ON DOOR GLASS	1100F
1100G	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04	-	-	MAG HOLDS, SAFETY FILM ON DOOR GLASS	1100G
1100H	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04	-	-	MAG HOLDS, SAFETY FILM ON DOOR GLASS	1100H
1101A	3' - 0 3/4"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04A	-	-	MAG HOLDS	1101A
1101B	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04A	-	-	MAG HOLDS	1101B
1101C	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04	-	-	MAG HOLDS	1101C
1101D	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04	-	-	MAG HOLDS	1101D
1102A	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A09	-	-	CARDREADER, SAFETY FILM ON DOOR GLASS	1102A
1102B	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A11	-	-	ELECTRIFIED LOCK AND STRIKE WITH DURESS BUTTON	1102B
1103	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	31	-	-		1103
1104	3' - 0"	7' - 0"	2"	F	AL	AL	01	AL	AL	A15	-	-		1104
1105	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	09	-	-	CARDREADER	1105
1106	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HM	PAINT	31	-	-		1106
1107	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	34	-	-		1107
1108	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31	-	-		1108
1109	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	19	-	-		1109
1110	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	31A	-	-		1110
1111	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	24	-	-		1111
1112	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	31	-	-		1112
1113	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31	-	-		1113
1114	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	21	-	-		1114
1115	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	21	-	-		1115
1116	3' - 8"	7' - 0"	1 3/4"	D1	HM	PAINT	02	HM	PAINT	37	RATED			1116
1118A	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A13			SAFETY FILM ON DOOR GLASS	1118A
1118B	6' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A14	-	-	CARDREADER, SAFETY FILM ON DOOR GLASS, ADA ACTUATOR	1118B
1118C	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A02			CARDREADER, SAFETY FILM ON DOOR GLASS, ADA ACTUATOR	1118C
1120	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	22	-	-		1120
1122	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	11	-	-	CARDREADER	1122
1123	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	11	-	-	CARDREADER	1123
1200A	6' - 0"	7' - 0"	1 3/4"	D2	HM	PAINT	04	HM	PAINT	14	-	RATED	MAG HOLDS	1200A
1200B	6' - 0"	7' - 0"	1 3/4"	E2	HM	PAINT	04	HM	PAINT	14	-	RATED	MAG HOLDS	1200B
1200C	6' - 0"	7' - 0"	1 3/4"	E2	HM	PAINT	04	HM	PAINT	14	-	RATED	MAG HOLDS	1200C
1201	3' - 8"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	13	-	-		1201
1202B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	08	-	-	EXTERIOR EMERGENCY PASSAGE DOOR, CONNECT TO ALARM SYSTEM	1202B
1203	3' - 0"	7' - 0"	1 3/4"	D	WD	WD	02	HM	PAINT	27	-	-		1203
1204	3' - 0"	7' - 0"	1 3/4"	D	WD	WD	02	HM	PAINT	26	-	-	CARDREADER	1204
1206B	6' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	04	HM	PAINT	07	-	-	EXTERIOR MECH DOOR	1206B
1206C	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	04	-	-	EXTERIOR MECH DOOR	1206C
1206D	3' - 8"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	28	-	-		1206D
1207A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	01	-	-	EXTERIOR MECH DOOR	1207A
1207B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	01	-	-		1207B
1208	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	03	-	-		1208
1209	8' - 0"	8' - 0"	2"	G	MTL	PAINT	04	-	-	42	-	-	OVERHEAD COILING DOOR	1209
1210	6' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	04	HM	PAINT	30	-	-		1210
1211B	12' - 0"	7' - 4"	2"	G	MTL	PAINT	-	-	-	42	-	-	MOTORIZED, VERTICAL TRACK	1211B
1213	4' - 0"	7' - 0"	1 3/4"	E	HM	PAINT	01	HM	PAINT	29	-	-		1213
1214A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	25	-	-		1214A
1214B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	25	-	-		1214B
1215	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	27	-	-		1215
1218	4' - 0"	7' - 0"	1 3/4"	E	HM	PAINT	01	HM	PAINT	27	-	-		1218
1219	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	27	-	-		1219
1220	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	19	-	-		1220
1221	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	31	-	-		1221
1222A	6' - 0"	7' - 0"	1 3/4"	D2	HM	PAINT	04	HM	PAINT	38	-	RATED	KEY IN LOCK	1222A
1222B	10' - 0"	10' - 0"	2"	H						42	-	-	OVERHEAD SECTIONAL DOOR	1222B
1222C	3' - 0"	7' - 0"	1 3/4"	E	HM	PAINT	02	HM	PAINT	05			EXTERIOR PASSAGE DOOR	1222C
1222D	3' - 8"	7' - 0"	1 3/4"	D	HM	PAINT	04	HM	PAINT	06	-	-		1222D
1223	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	31	-	-		1223
1301	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	18	-	-		1301
1302A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	12A	-	-	CARDREADER BOTH SIDES, DELAYED RELEASE	1302A
1302B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1302B
1303	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	20	-	-		1303
1304A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	22	-	-		1304A
1304B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	22	-	-		1304B
1305	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	20	-	-		1305
1306A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	12A	-	-	CARDREADER BOTH SIDES, DELAYED RELEASE	1306A
1306B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1306B
1307	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A15	-	-		1307
1308	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	12A	-	-	CARDREADER BOTH SIDES, DELAYED RELEASE	1308
1309	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	23	-	-		1309
1310	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	20	-	-		1310
1311	3' - 0"	7' - 0"	2"	F	AL	AL		AL	AL	A16				1311
1312	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	12A	-	-	CARDREADER	1312

DOOR AND FRAME SCHEDULE

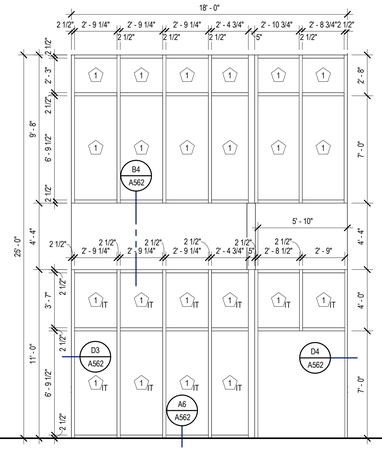
DOOR NUMBER	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THICK	DOOR ELEV. TYPE	DOOR MATERIAL	DOOR FINISH/ FACING	FRAME ELEV. TYPE	FRAME MATERIAL	FRAME FINISH/ FACING	HARD WARE GROUP	GLAZING TYPE	LABLE (MIN.)	NOTES	DOOR NUMBER
1313A	3' - 0"	7' - 0"	1 3/4"	E	HM	PAINT	02	HM	PAINT	16	-	-		1313A
1313B	3' - 0"	7' - 0"	1 3/4"	E	HM	PAINT	02	HM	PAINT	16	-	-		1313B
1314	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	23	-	-		1314
1315A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1315A
1315B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1315B
1316	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	20	-	-		1316
1317A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		1317A
1317B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		1317B
1318	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	20	-	-		1318
1319A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1319A
1319B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1319B
1320A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1320A
1320B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1320B
1321	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	20	-	-		1321
1322A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		1322A
1322B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		1322B
1323	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	20	-	-		1323
1324A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1324A
1324B	1'2 - 0"	7' - 0"	1 1/2"	I			-			41				1324B
1325	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A15	-	-		1325
1326A	5' - 8"	7' - 0"	2"	F	AL	AL	03	AL	AL	A06	-	-		1326A
1326B	3' - 6"	7' - 0"	2"	F	AL	AL	03	AL	AL	A07	-	-	CARDREADER	1326B
1327	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	04	HM	PAINT	02	-	-		1327
1330	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	18	-	-		1330
1331	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	31	-	-		1331
1332	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	33	-	-		1332
1333	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	33	-	-		1333
1334	6' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	04	HM	PAINT	30	-	-		1334
1335A	6' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A06A	-	-	CARDREADER, DELAYED RELEASE	1335A
1335B	6' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A12	-	-		1335B
1336A	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A10	-	-	CARDREADER, DELAYED RELEASE	1336A
1336B	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	17	-	-	MAG HOLDS	1336B
1400A	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A01	-	-	SAFETY FILM ON DOOR GLASS	1400A
1400B	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A01	-	-	SAFETY FILM ON DOOR GLASS	1400B
1400C	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A01	-	-	SAFETY FILM ON DOOR GLASS	1400C
1400D	2' - 11 11/16"	7' - 0"	2"	F	AL	AL	03	AL	AL	A10	-	-	CARDREADER, SAFETY FILM ON DOOR GLASS	1400D
1400E	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04	-	-	SAFETY FILM ON DOOR GLASS	1400E
1400F	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04	-	-	SAFETY FILM ON DOOR GLASS	1400F
1400G	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04	-	-	SAFETY FILM ON DOOR GLASS	1400G
1400H	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04	-	-	SAFETY FILM ON DOOR GLASS	1400H
1401A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1401A
1401B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1401B
1402A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	23	-	-		1402A
1402B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	23	-	-		1402B
1403A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1403A
1403B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1403B
1404	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A16	-	-		1404
1405A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1405A
1405B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1405B
1406A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	23	-	-		1406A
1406B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	23	-	-		1406B
1407A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1407A
1407B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1407B
1408	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A16				1408
1410A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	18	-	-		1410A
1410B	1' - 8"	7' - 0"	1 3/4"	D	HM	PAINT		HM	PAINT	40	-	-		1410B
1412A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1412A
1412B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1412B
1413A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	23	-	-		1413A
1413B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	23	-	-		1413B
1414A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1414A
1414B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1414B
1415A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1415A
1415B	14' - 0"	7' - 0"	1 1/2"	I			-			41				1415B
1416A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	23	-	-		1416A
1416B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	23	-	-		1416B
1417A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		1417A
1417B	12' - 0"	7' - 0"	1 1/2"	I			-			41				1417B
1418	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A16	-	-		1418
1419A	5' - 8"	7' - 0"	2"	F	AL	AL	03	AL	AL	A06	-	-		1419A
1419B	3' - 6 1/2"	7' - 0"	2"	F	AL	AL	03	AL	AL	A07	-	-	CARDREADER	1419B
1420	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	04	HM	PAINT	02	-	-		1420
1421	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	33	-	-		1421
1422	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	33	-	-		1422
1424	2' - 8"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	22	-	-		1424
1426	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A10	-	-	CARDREADER, DELAYED RELEASE	1426
1426B	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	17	-	-	MAG HOLDS	1426B
1427	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	34A	-	-		1427
2100	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	24	-	-		2100
2101A	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04A	-	-	MAG HOLDS	2101A
2101B	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04A	-	-	MAG HOLDS	2101B
2101C	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04A	-	-	MAG HOLDS	2101C
2101D	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A04A	-	-	MAG HOLDS	2101D

DOOR AND FRAME SCHEDULE

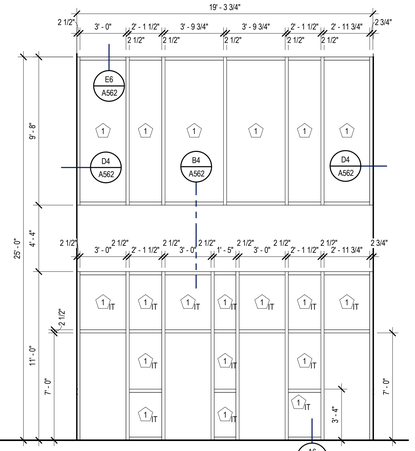
DOOR NUMBER	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THICK	DOOR ELEV. TYPE	DOOR MATERIAL	DOOR FINISH/ FACING	FRAME ELEV. TYPE	FRAME MATERIAL	FRAME FINISH/ FACING	HARD WARE GROUP	GLAZING TYPE	LABLE (MIN.)	NOTES	DOOR NUMBER
2102	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	12A	-	-	CARDREADER BOTH SIDES, DELAYED RELEASE	2102
2103	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HM	PAINT	23	-	-		2103
2104	3' - 0"	7' - 0"	2"	A	AL	AL	03	AL	AL	A17	-	-		2104
2105	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31				2105
2106	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31				2106
2107	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31				2107
2108	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31				2108
2109	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31				2109
2110	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31				2110
2111A	6' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	35	-	-		2111A
2111B	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31				2111B
2112	3' - 0"	7' - 0"	1 3/4"	B	WD	WD	01	HW	PAINT	31A				2112
2113	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	18	-	-		2113
2200	6' - 0"	7' - 0"	2"	D2	HM	PAINT	04	HM	PAINT	38	-	RATED		2200
2200A	6' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	04	HM	PAINT	33A	-	-		2200A
2301A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2301A
2301B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2301B
2302A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2302A
2302B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2302B
2303A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2303A
2303B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2303B
2304	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A16	-	-		2304
2305A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2305A
2305B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2305B
2306A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2306A
2306B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2306B
2307A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2307A
2307B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2307B
2308	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A16				2308
2310A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	18	-	-		2310A
2310B	1' - 8"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	40	-	-		2310B
2312A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2312A
2312B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2312B
2313A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2313A
2313B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2313B
2314A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2314A
2314B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2314B
2315A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2315A
2315B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2315B
2316A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2316A
2316B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2316B
2317A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2317A
2317B	12' - 0"	7' - 0"	1 1/2"	I			-			41				2317B
2318	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A15	-	-		2318
2320	1' - 8"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	36A	-	-		2320
2322	6' - 0"	7' - 0"	1 3/4"	F	AL	AL	04							2322
2323A	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	23	-	-		2323A
2323B	3' - 0"	7' - 0"	1 3/4"	C	WD	WD	01	HM	PAINT	10	-	-		2323B
2323C	3' - 0"	7' - 0"	1 3/4"	A	WD	WD	01	HM	PAINT	23	-	-		2323C
2326	3' - 6"	7' - 0"	2"	F	AL	AL	03	AL	AL	A08	-	-	CARDREADER	2326
2401A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2401A
2401B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2401B
2402A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2402A
2402B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2402B
2403A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2403A
2403B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2403B
2404	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A16	-	-		2404
2405A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2405A
2405B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2405B
2406A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2406A
2406B	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	02	HM	PAINT	22	-	-		2406B
2407A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2407A
2407B	14' - 0"	7' - 0"	1 1/2"	I			-			41				2407B
2408	3' - 0"	7' - 0"	2"	F	AL	AL	03	AL	AL	A16				2408
2410A	3' - 0"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	18	-	-		2410A
2410B	1' - 8"	7' - 0"	1 3/4"	D	HM	PAINT	01	HM	PAINT	40	-	-		2410B
2412A	3' - 0"	7' - 0"	1 3/4"	C	HM	PAINT	01	HM	PAINT	10	-	-		2412A



CW110
SCALE: 1/4" = 1'-0"



CW111
SCALE: 1/4" = 1'-0"



CW113
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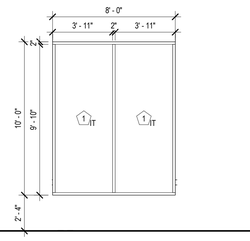

AL114
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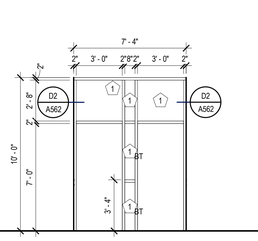
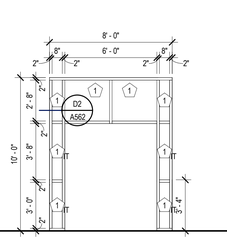
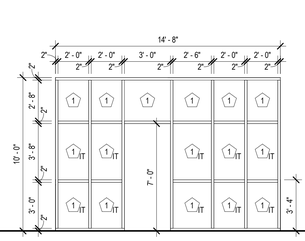


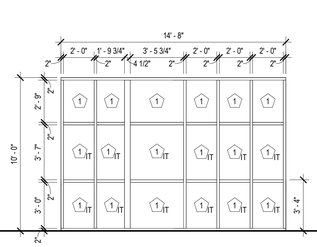
AL116
SCALE: 1/4" = 1'-0"



AL117
SCALE: 1/4" = 1'-0"

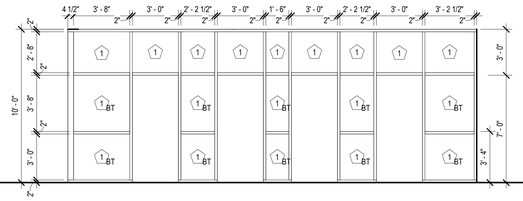


AL118
SCALE: 1/4" = 1'-0"



AL119
SCALE: 1/4" = 1'-0"

AL120
SCALE: 1/4" = 1'-0"



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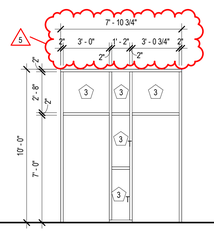
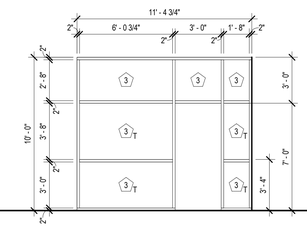
SCALE: 1/4" = 1'-0"



AL122
SCALE: 1/4" = 1'-0"



AL123
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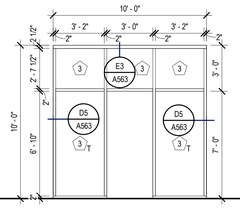

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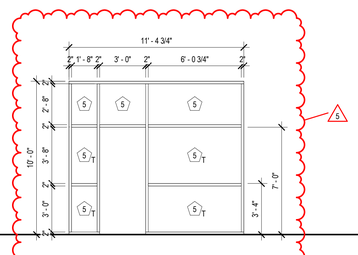
SCALE: 1/4" = 1'-0"



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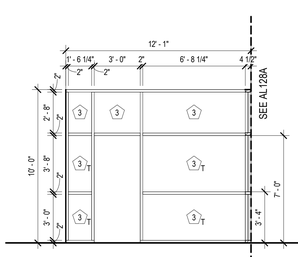
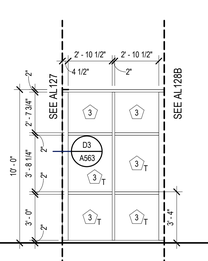
SCALE: 1/4" = 1'-0"



AL127
SCALE: 1/4" = 1'-0"



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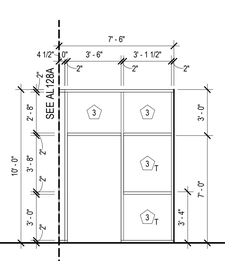
SCALE: 1/4" = 1'-0"



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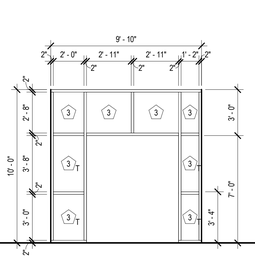
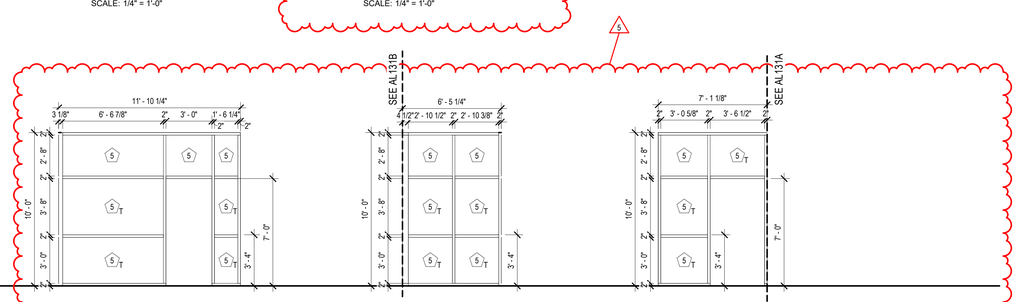
SCALE: 1/4" = 1'-0"



AL129
SCALE: 1/4" = 1'-0"



AL130
SCALE: 1/4" = 1'-0"

AL131A
SCALE: 1/4" = 1'-0"

AL131B
SCALE: 1/4" = 1'-0"

DOOR & FRAME NOTES

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12. SANDBLAST OR PRINTED INTERLAYER PRIVACY GRAPHIC.
13. ROLLER SHADES, FLUSH WITH FACE OF WINDOW, REQUIRED AT ALL EXTERIOR WINDOWS EXCEPT WHERE NOTED OTHERWISE, SEE SPECIFICATION.
14. HEAVY WALL FRAMES AT HINGES AND LATCH SIDE OF ALL ALUMINUM DOORS.

GLAZING TYPE LEGEND

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1	1" INSULATED , LOW-E SOLAR BAN 70
2	1" INSULATED, SAND BLASTED, LOW-E SOLAR BAN 70
3	1/4" FLOAT GLASS
4	1/4" FLOAT GLASS WITH SAND BLASTED PATTERN
5	1/2" CLEAR LAMINATED GLASS
6	1/2" CLEAR LAMINATED GLASS WITH SAND BLASTED PATTERN
7	3/4" CLEAR LAMINATED GLASS
8	1" INSULATED SPANDREL, LOW-E, CSBA
9	1" INSULATED CLEAR GLASS WITH SANDBLASTED PATTERN
#I	'I' INDICATES IMPACT SECURITY FILM
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SALT LAKE CITY, UT 84102
801.575.8800
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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

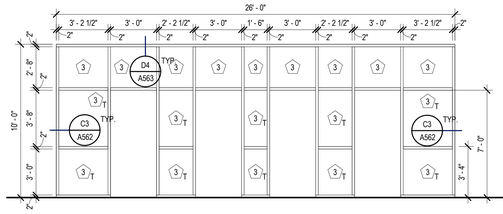
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

CURTAINWALL + STOREFRONT ELEVATIONS

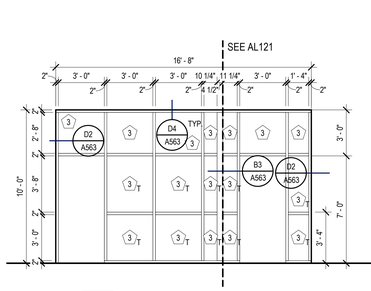
A610

11/17/2023 12:31:18 PM



AL135

SCALE: 1/4" = 1'-0"



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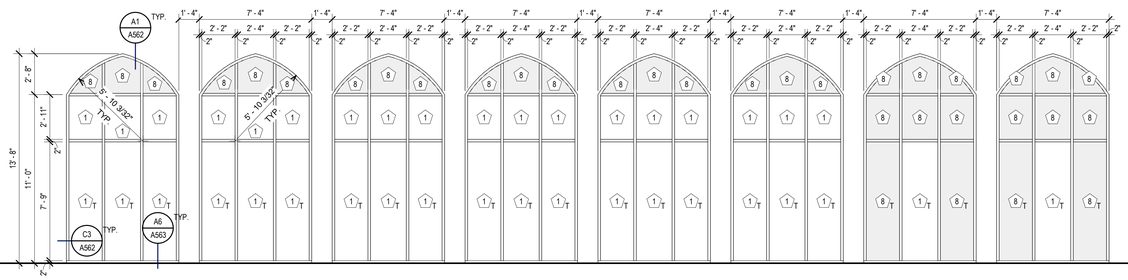
SCALE: 1/4" = 1'-0"



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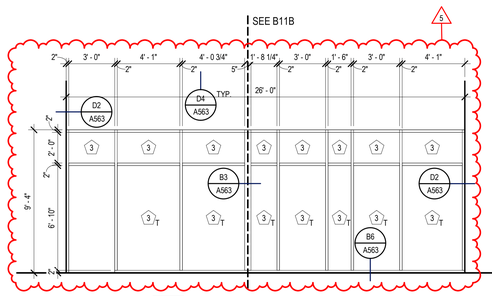
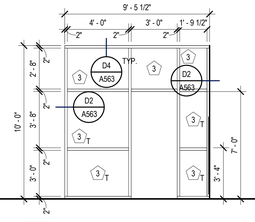
SCALE: 1/4" = 1'-0"



AL201

SCALE: 1/4" = 1'-0"

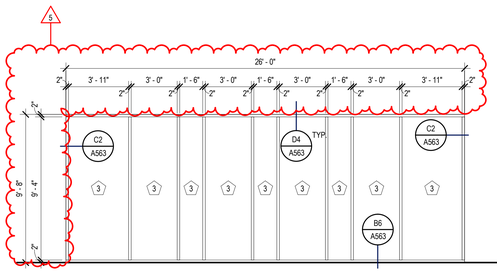


AL202

SCALE: 1/4" = 1'-0"

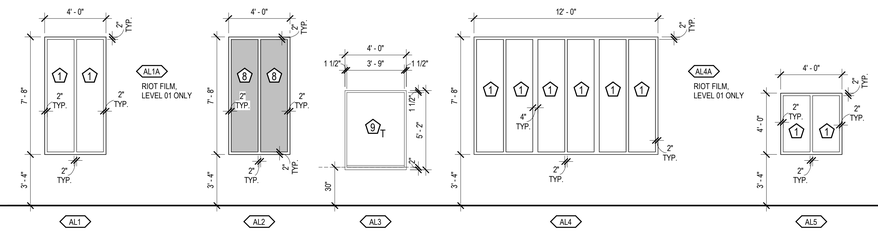
AL205

SCALE: 1/4" = 1'-0"



AL213

SCALE: 1/4" = 1'-0"



ALUMINUM WINDOWS

SCALE: 1/4" = 1'-0"

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH
BRENT B. WILKINSON
7057969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

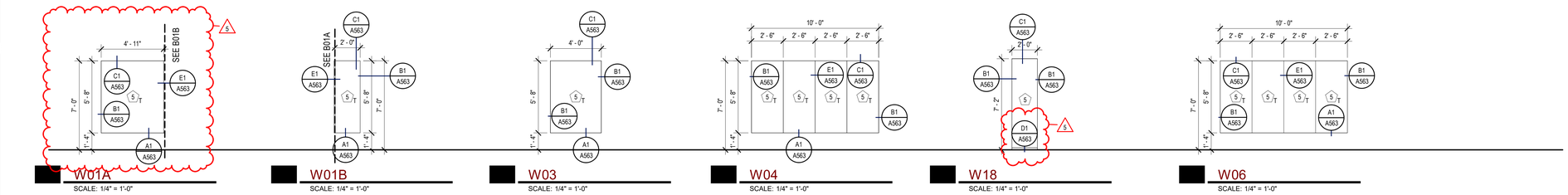
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

CURTAINWALL + STOREFRONT + WINDOW ELEVATIONS

A611

11/17/2023 12:31:23 PM



W01A SCALE: 1/4" = 1'-0"

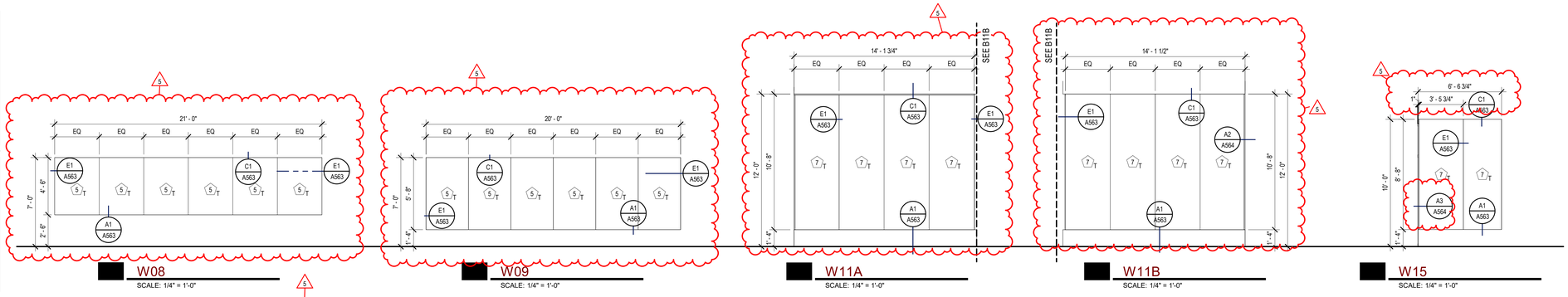
W01B SCALE: 1/4" = 1'-0"

W03 SCALE: 1/4" = 1'-0"

W04 SCALE: 1/4" = 1'-0"

W18 SCALE: 1/4" = 1'-0"

W06 SCALE: 1/4" = 1'-0"



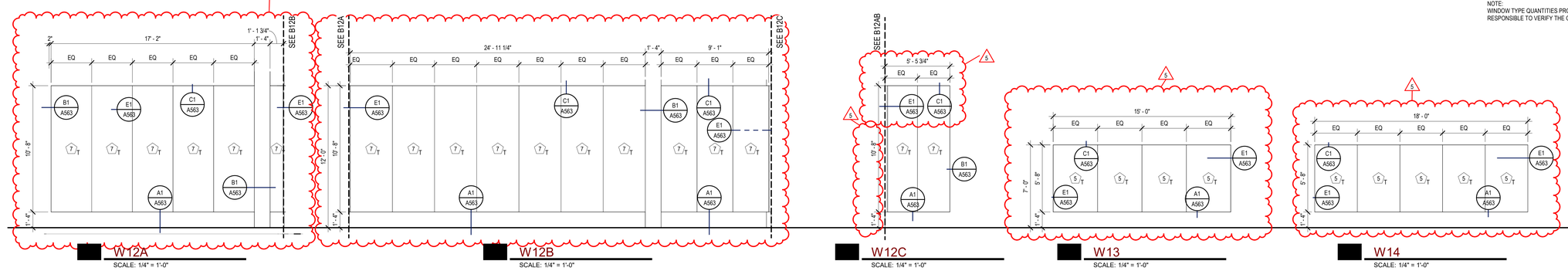
W08 SCALE: 1/4" = 1'-0"

W09 SCALE: 1/4" = 1'-0"

W11A SCALE: 1/4" = 1'-0"

W11B SCALE: 1/4" = 1'-0"

W15 SCALE: 1/4" = 1'-0"



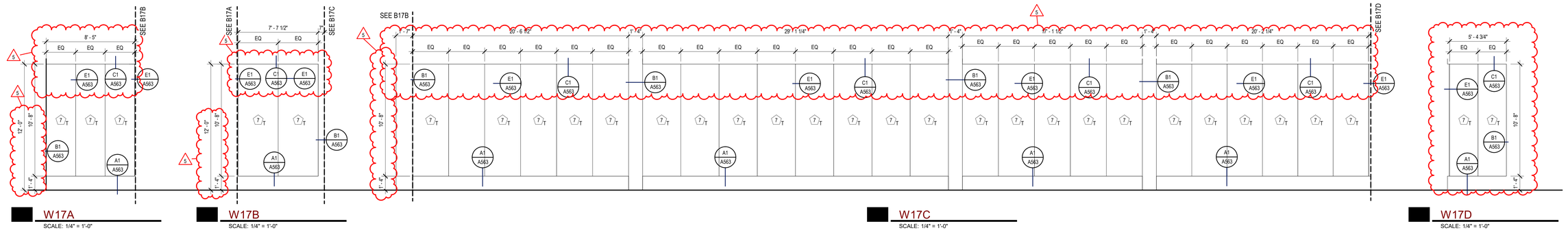
W12A SCALE: 1/4" = 1'-0"

W12B SCALE: 1/4" = 1'-0"

W12C SCALE: 1/4" = 1'-0"

W13 SCALE: 1/4" = 1'-0"

W14 SCALE: 1/4" = 1'-0"

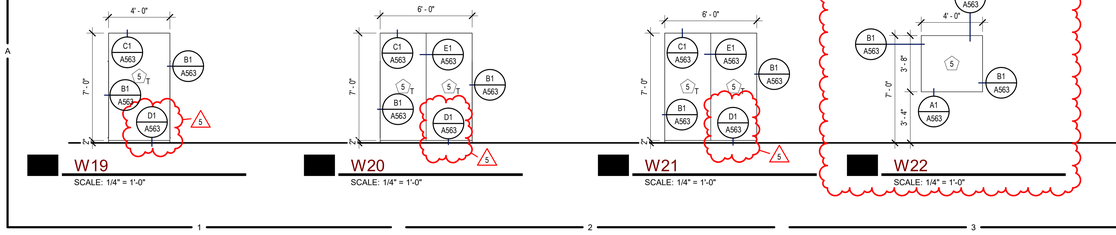


W17A SCALE: 1/4" = 1'-0"

W17B SCALE: 1/4" = 1'-0"

W17C SCALE: 1/4" = 1'-0"

W17D SCALE: 1/4" = 1'-0"



W19 SCALE: 1/4" = 1'-0"

W20 SCALE: 1/4" = 1'-0"

W21 SCALE: 1/4" = 1'-0"

W22 SCALE: 1/4" = 1'-0"

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VCBO NUMBER: 22785
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STATE OF UTAH
JASON SHEARMAN
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

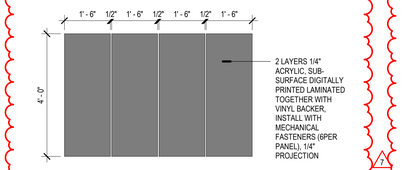
BUTT GLAZING ELEVATIONS

A612

11/17/2023 12:31:32 PM

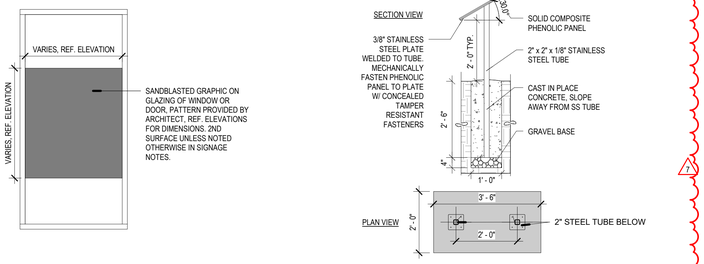
E1 TYPE LTRS - DIMENSIONAL LETTERS

SCALE: 1 : 9



E3 TYPE WING - ACRYLIC INFO SIGNS

SCALE: 1/2" = 1'-0"

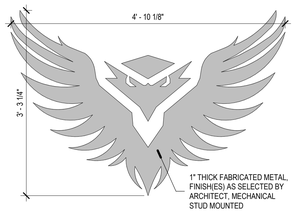


E4 TYPE SAND - SANDBLAST GRAPHIC

SCALE: 1/2" = 1'-0"

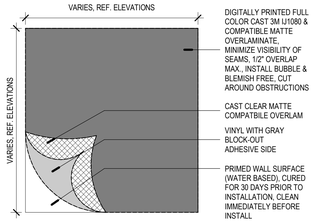
E5 TYPE LAND - LANDSCAPE SIGN & PEDESTAL

SCALE: 1/2" = 1'-0"



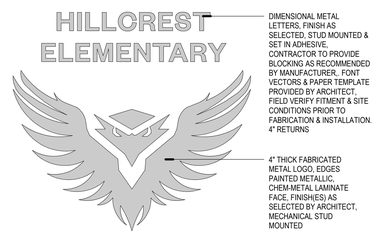
D1 TYPE HAWK - HAWK DIMENSIONAL SIGN

SCALE: 1 : 13



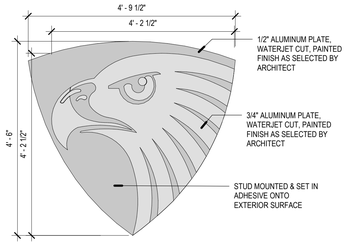
D2 TYPE WG - WALL GRAPHIC VINYL WRAP

SCALE: 3" = 1'-0"



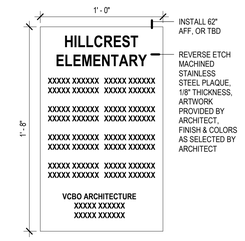
D3 TYPE RCPT - RECEPTION SIGN

SCALE: 1 : 15



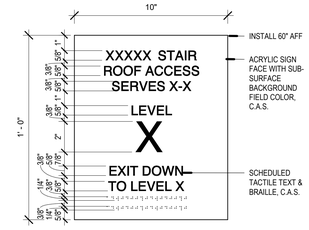
D4 TYPE CREST - CREST DIMENSIONAL LOGO

SCALE: 1 : 17



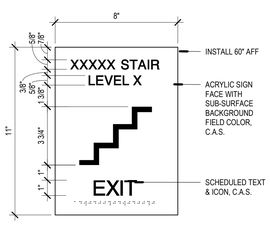
D5 TYPE PLQ - DEDICATION PLAQUE

SCALE: 1 : 6



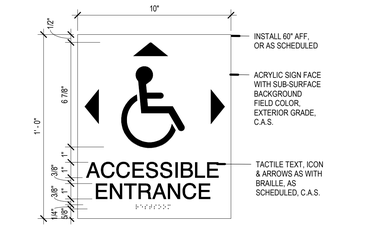
C1 TYPE LVL - LEVEL/STAIRWELL ID

SCALE: 3" = 1'-0"



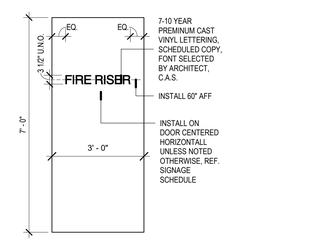
C2 TYPE SID - STAIR ID

SCALE: 3" = 1'-0"



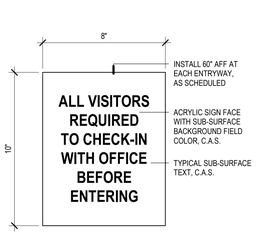
C3 TYPE DIR - ACCESSIBLE DIRECTIONAL

SCALE: 3" = 1'-0"



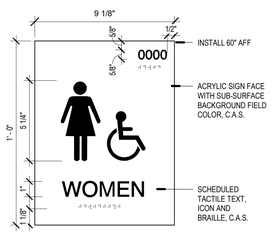
C4 TYPE VNYL - VINYL LETTERING

SCALE: 1/2" = 1'-0"



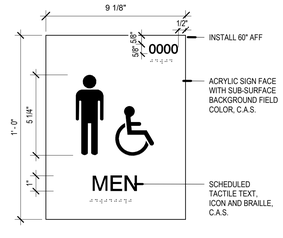
C5 TYPE SECR - SECURE ENTRY SIGN

SCALE: 3" = 1'-0"



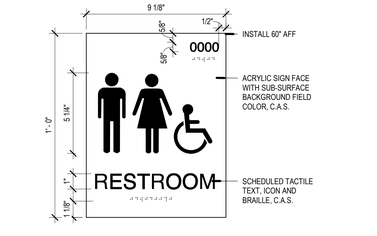
B1 TYPE WM - WOMEN RR

SCALE: 3" = 1'-0"



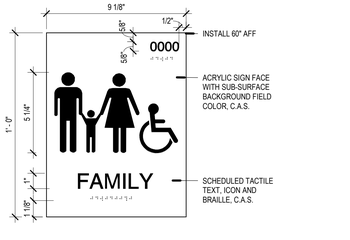
B2 TYPE MN - MEN RESTROOM

SCALE: 3" = 1'-0"



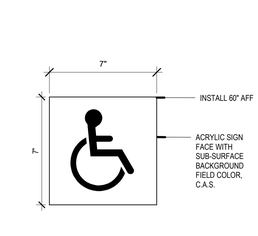
B3 TYPE UNI - UNISEX RR

SCALE: 3" = 1'-0"



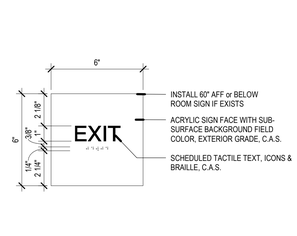
B4 TYPE FAM - FAMILY RR

SCALE: 3" = 1'-0"



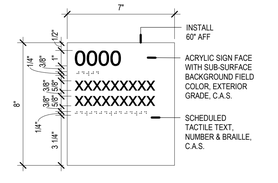
B5 TYPE ADA - ADA ACCESSIBLE

SCALE: 3" = 1'-0"



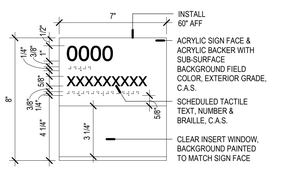
B6 TYPE EXIT - TACTILE EXIT

SCALE: 3" = 1'-0"



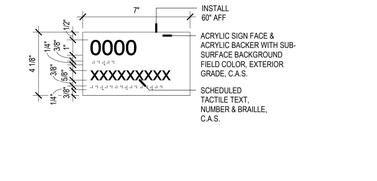
A1 TYPE RMA1 - ROOM ID LARGE

SCALE: 3" = 1'-0"



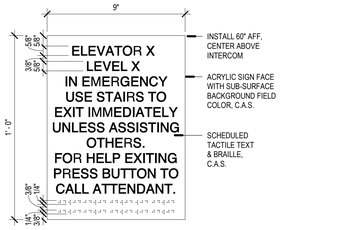
A2 TYPE RMA2 - ROOM ID LARGE w/INSERT

SCALE: 3" = 1'-0"



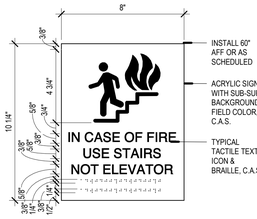
A3 TYPE RMB - ROOM ID SMALL

SCALE: 3" = 1'-0"



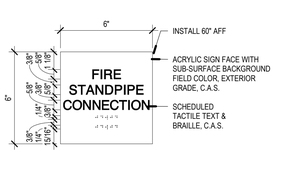
A4 TYPE INT - ELEVATOR INTERCOM/INFO

SCALE: 3" = 1'-0"



A5 TYPE ELEV - ELEVATOR EGRESS

SCALE: 3" = 1'-0"



A6 TYPE INFO - INFO/CODE

SCALE: 3" = 1'-0"

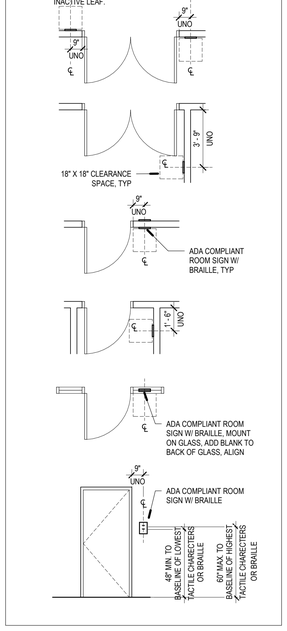
SIGN NOTES

1. ALL SIGNS TO MEET CHAPTER 7 OF ANSI 117.1, 2003 AND INCLUDE GRADE 2 BRAILLE. FINISH AND CONTRAST. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND, WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARECTERS ON A LIGHT BACKGROUND.
2. ALL SANITARY FACILITIES MUST BE IDENTIFIED, INCLUDE INTERNATIONAL SYMBOL OF ACCESSIBILITY, PICTOGRAMS AND BRAILLE.
3. ALL ASSEMBLY OCCUPANCIES TO HAVE OCCUPANT LOAD POSTED NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY.
4. PROVIDE CODE REQUIRED SIGNAGE AT STAIRS: TACTILE SIGN WITH "EXIT" OUTSIDE STAIR DOORS ON UPPER FLOORS. INSIDE STAIR SIGN TO INDICATE STAIR NUMBER, EXIT LEVEL AND LEVEL ON.
5. PROVIDE CODE REQUIRED SIGNAGE AT ALL ELEVATOR DOORS.
6. INCLUDE VINYL BACKER ON 2ND SURFACE WHEN SIGNAGE IS INSTALLED ON GLAZING.

TYP SIGNAGE LOCATIONS

NOTE:

- TYP SIGN HEIGHT, ARCHITECT TO FIELD VERIFY SIGN LOCATIONS WHEN CONFLICTS W/ DEVICES ARISE.
- SIGNS W/ TACTILE CHARACTERS SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS W/ CLOSERS & W/O HOLD-OPEN DEVICES.
- WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS W/ ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF.



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

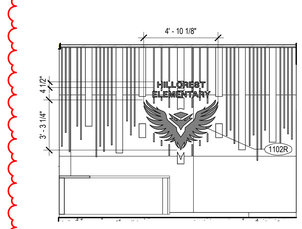
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SIGNAGE TYPES + DETAILS

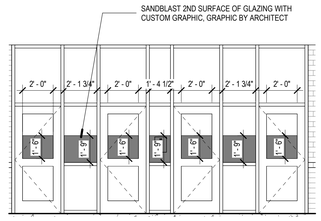
A700

11/27/2023 12:45:54 PM



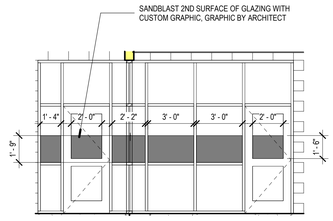
E1 RECEPTION LOGO 1102

SCALE: 1/4" = 1'-0"



E2 ENTRY SANDBLAST

SCALE: 1/4" = 1'-0"

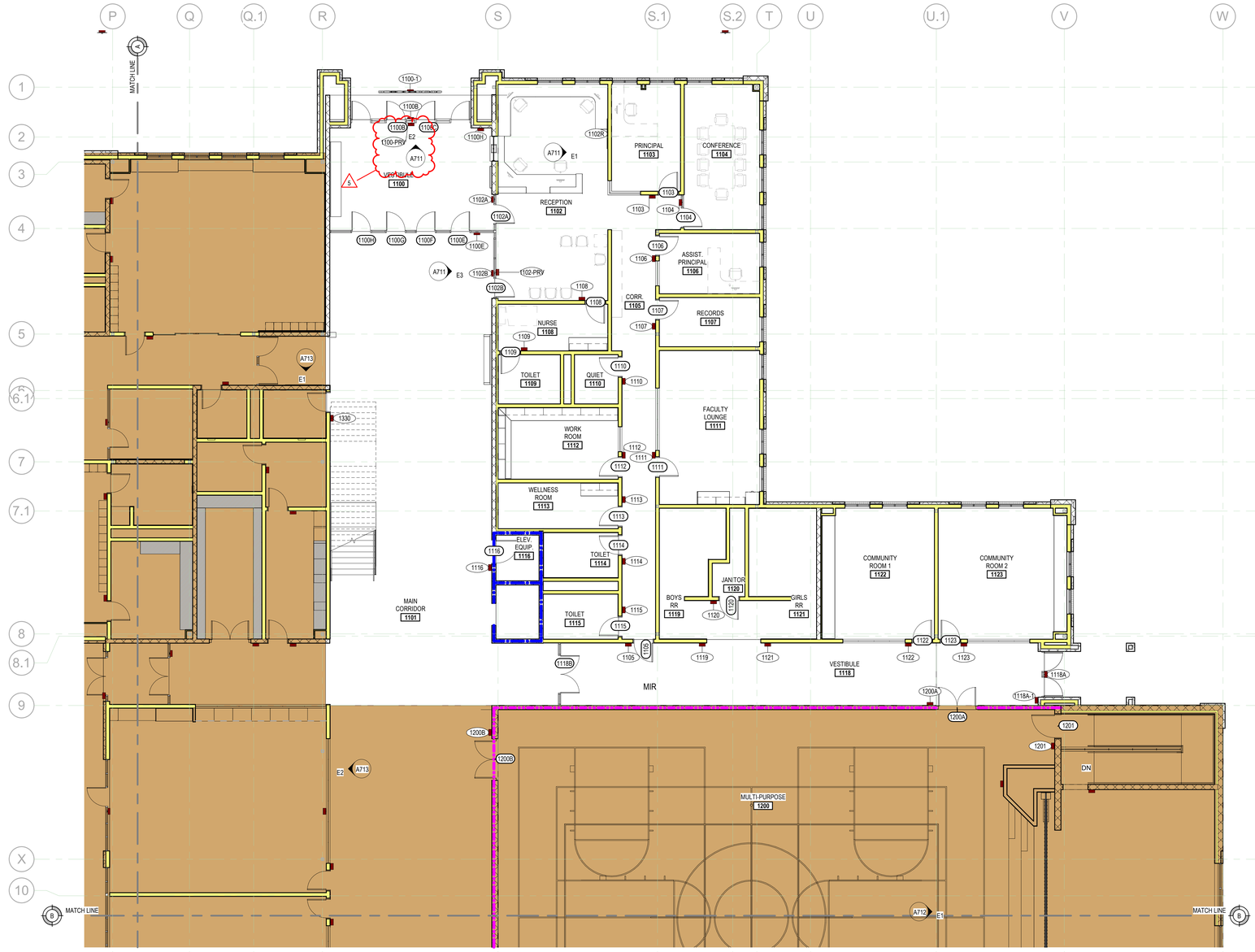


E3 RECEPTION SANDBLAST

SCALE: 1/4" = 1'-0"

SIGNAGE SCHEDULE - LEVEL 01 - ARE 11

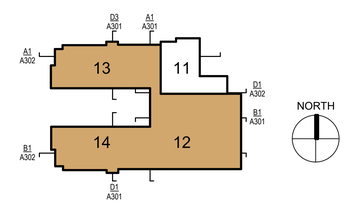
Mark	Sign Type	Sign Rm#	Sign Text	Detail	Sign Notes
1100-1	LTRS		HILLCREST ELEMENTARY	E1/A700	12" TALL X 3" DEEP, REF. B1/A201
1100-PRV	PRV		TO BE DETERMINED	REF. ELEVATION	REF. E2/A711
1100B	SECR	-	TYP.	C5/A700	
1100E	EXIT	-	EXIT	B6/A700	
1100H	PLQ	-	ARTWORK BY ARCHITECT	D5/A700	
1102-PRV	PRV		TO BE DETERMINED	REF. ELEVATION	
1102A	RMA1	1102	RECEPTION	A1/A700	
1102B	RMA1	1102	RECEPTION	A1/A700	
1102R	RCPT			D3/A700	REF. E1/A700
1103	RMA2	1103	PRINCIPAL	A2/A700	
1104	RMA1	1104	CONFERENCE	A1/A700	
1105	RMA1	1102	RECEPTION	A1/A700	
1106	RMA2	1106	OFFICE	A2/A700	
1107	RMA1	1107	RECORDS	A1/A700	
1108	RMA2	1108	NURSE	A2/A700	
1109	UNI	1109	RESTROOM	B3/A700	
1110	RMA1	1110	QUIET	A1/A700	
1111	RMA1	1111	FACULTY LOUNGE	A1/A700	
1112	RMA1	1112	WORK ROOM	A1/A700	
1113	RMA1	1113	WELLNESS	A1/A700	
1114	UNI	1114	RESTROOM	B3/A700	
1115	UNI	1115	RESTROOM	B3/A700	
1116	RMB	1116	ELEVATOR EQUIP	A3/A700	
1118A	SECR	-	TYP.	C5/A700	
1118A-1	EXIT	-	EXIT	B6/A700	
1119	MN	1119	MEN	B2/A700	
1120	RMB	1120	JANITOR	A3/A700	
1121	WM	1121	WOMEN	B1/A700	
1122	RMA1	1122	COMMUNITY ROOM 1	A1/A700	
1123	RMA1	1123	COMMUNITY ROOM 2	A1/A700	



A1 ANNOTATED PLAN - LEVEL 01

SCALE: 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

STATE OF UTAH
SHERI A. GOW
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

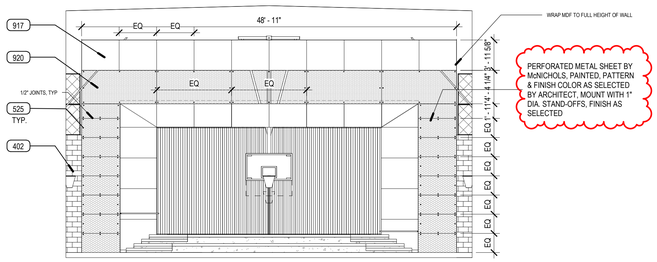
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SIGNAGE SCHEDULE + PLANS - LEVEL 1 - AREA 11

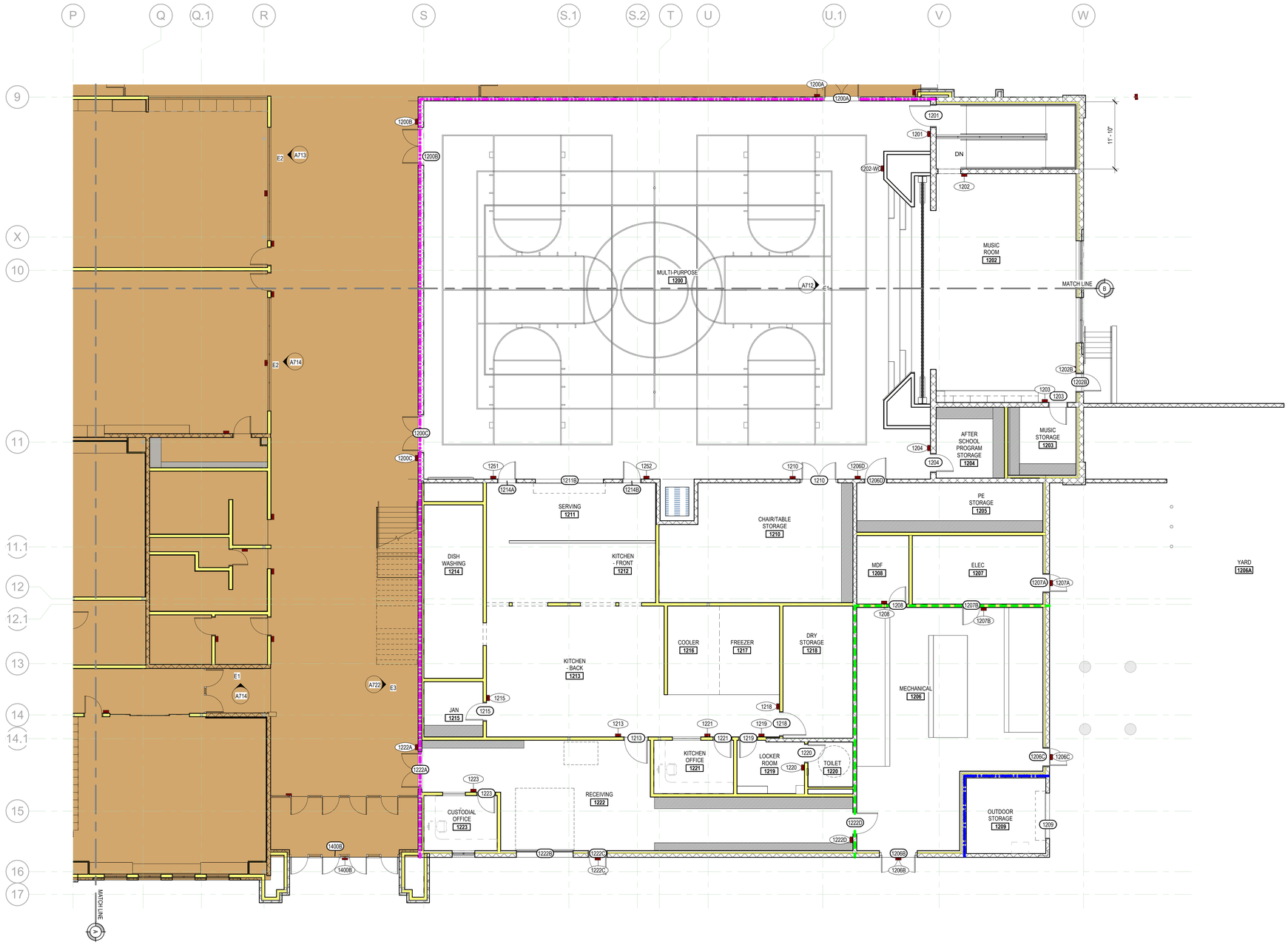
A711

11/17/2023 1:12:21 PM



E1 PROSCENIUM GRAPHIC

SCALE: 1/8" = 1'-0"



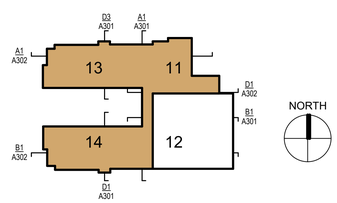
A1 SIGN PLAN - LEVEL 01 - AREA 12

SCALE: 1/8" = 1'-0"

SIGNAGE SCHEDULE - LEVEL 01 - ARE 12

Mark	Sign Type	Sign Rm#	Sign Text	Detail	Sign Notes
1200A	RMA1	1200	MULTI-PURPOSE	A1/A700	
1200B	RMA1	1200	MULTI-PURPOSE	A1/A700	
1200C	RMA1	1200	MULTI-PURPOSE	A1/A700	
1201	ADA	-	(ACCESSIBLE ICON)	B6/A700	
1202	ADA	-	(ACCESSIBLE ICON)	B6/A700	
1202-WG	WG		(ARTWORK BY ARCHITECT)	E1/A712	REF. E1/A712
1202B	INFO	-	NOT AN ACCESSIBLE EXIT	A6/A700	
1203	RMB	1203	STORAGE	A3/A700	
1204	RMB	1204	STORAGE	A3/A700	
1206B	VNYL	-	MECH ROOM	C4/A700	
1206C	VNYL	-	FIRE RISER	C4/A700	
1206D	RMB	1205	STORAGE	A3/A700	
1207A	VNYL	-	ELECTRICAL	C4/A700	
1207B	RMB	1207	ELECTRICAL	A3/A700	
1208	RMB	1208	MDF	A3/A700	
1210	RMB	1210	STORAGE	A3/A700	
1213	RMA1	1222	RECEIVING	A1/A700	
1215	RMB	1215	JANITORIAL	A3/A700	
1218	RMB	1218	STORAGE	A3/A700	
1219	UNI	1219	LOCKERS	B3/A700	
1220	UNI	1220	TOILET	B3/A700	
1221	RMA2	1221	OFFICE	A2/A700	
1222A	RMA1	1222	RECEIVING	A1/A700	
1222C	VNYL	-	RECEIVING	C4/A700	
1222D	RMB	1206	MECHANICAL	A3/A700	
1223	RMA2	1223	CUSTODIAL	A2/A700	
1251	RMA1	1211	SERVING	A1/A700	
1252	RMA1	1211	SERVING	A1/A700	

KEY PLAN - MAIN LEVEL



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STATE OF UTAH
JOHN SHEARMAN
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

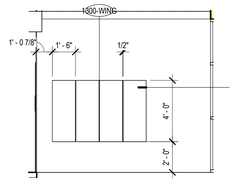
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SIGNAGE SCHEDULE + PLANS - LEVEL 1 - AREA 12

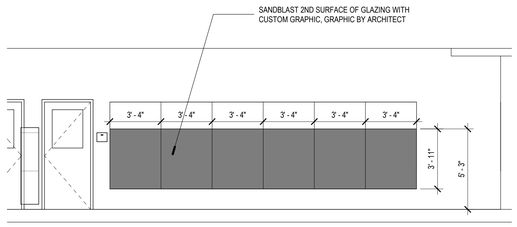
A712

11/17/2023 1:15:24 PM



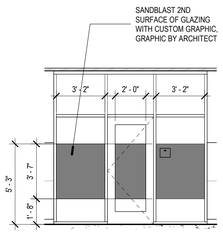
E1 1300 WING SIGNAGE

SCALE: 1/4" = 1'-0"



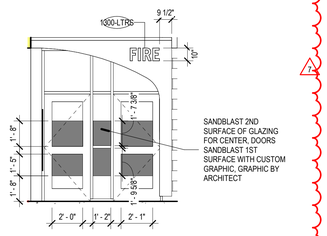
E2 STEAM LAB SANDBLAST

SCALE: 1/4" = 1'-0"



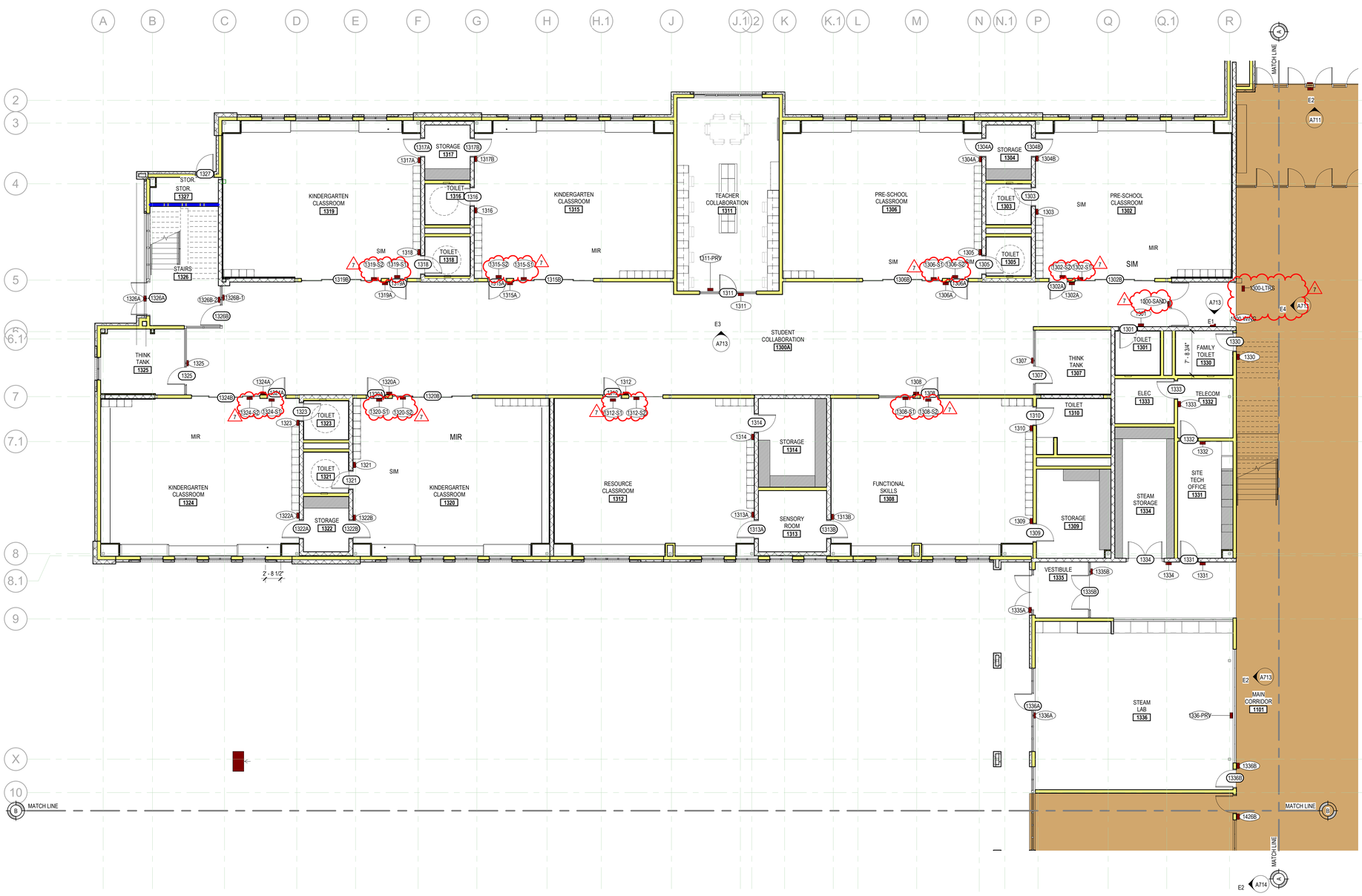
E3 TEACHER COLLAB 1311 SANDBLAST

SCALE: 1/4" = 1'-0"



E4 1300 WING LETTERS & SANDBLAST

SCALE: 1/4" = 1'-0"

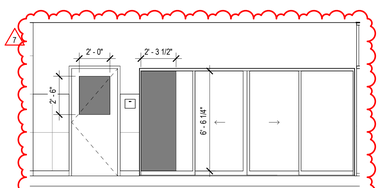


A1 SIGN PLAN - LEVEL 01 - AREA 13

SCALE: 1/8" = 1'-0"

SIGNAGE SCHEDULE - LEVEL 01 - ARE 13

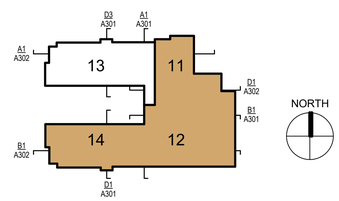
	Mark	Sign Type	Sign Rmk	Sign Text	Detail	Sign Notes
7	1300-LTRS	LTRS		FIRE	B3/A700	10" THCL X 3/4" RETURNS. REF. A4/A713
	1300-SAND	SAND		TO BE DETERMINED	E4/A712	REF. E4/A713
	1300-WING	WING			E3/A700	REF. E1/A713
	1301	UNI	1301	RESTROOM	B5/A700	
	1302-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A716
7	1302-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
	1302A	RMA2	1302	CLASSROOM	A2/A700	
	1303	UNI	1303	RESTROOM	B3/A700	
	1304A	RMB	1304	STORAGE	A3/A700	
	1304B	RMB	1304	STORAGE	A3/A700	
	1305	UNI	1305	RESTROOM	B3/A700	
	1306-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A716
7	1306-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
	1306A	RMA2	1306	CLASSROOM	A2/A700	
	1307	RMA1	1307	THINK TANK	A1/A700	
	1308	RMA2	1308	CLASSROOM	A2/A700	
	1308-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A716
7	1308-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
	1309	RMB	1309	STORAGE	A3/A700	
	1310	UNI	1310	RESTROOM	B3/A700	
	1311	RMA1	1311	TEACHER COLLAB	A1/A700	
	1311-PRV	PRV		TO BE DETERMINED	REF. ELEVATION	REF. E3/A713
	1312	RMA2	1312	CLASSROOM	A2/A700	
	1312-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A716
7	1312-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
	1313A	RMB	1313	SENSORY	A3/A700	
	1313B	RMB	1313	SENSORY	A3/A700	
	1314	RMB	1314	STORAGE	A3/A700	
	1315-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A716
7	1315-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
	1315A	RMA2	1315	CLASSROOM	A2/A700	
	1316	UNI	1316	RESTROOM	B3/A700	
	1317A	RMB	1317	STORAGE	A3/A700	
	1317B	RMB	1317	STORAGE	A3/A700	
	1318	UNI	1318	RESTROOM	B3/A700	
	1319-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A716
7	1319-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
	1319A	RMA2	1319	CLASSROOM	A2/A700	
	1320-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A716
7	1320-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
	1320A	RMA2	1320	CLASSROOM	A2/A700	
	1321	UNI	1321	RESTROOM	B3/A700	
	1322A	RMB	1322	STORAGE	A3/A700	
	1322B	RMB	1322	STORAGE	A3/A700	
	1323	UNI	1323	RESTROOM	B3/A700	
	1324-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A716
7	1324-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
	1324A	RMA2	1324	CLASSROOM	A2/A700	
	1325	RMA1	1325	THINK TANK	A1/A700	
	1326A	SECR	-	TYP.	C5/A700	
	1326B-1	SID	-	STAIR EXIT	C2/A700	
	1326B-2	RMB	-	LEVEL 1	A3/A700	
	1330	FAM	1330	FAMILY RESTROOM	B4/A700	
	1331	RMA1	1331	OFFICE	A1/A700	
	1332	RMB	1332	TELECOM	A3/A700	
	1333	RMB	1333	ELECTRICAL	A3/A700	
	1334	RMB	1334	STORAGE	A3/A700	
	1335A	SECR	-	TYP.	C5/A700	
	1335B	EXIT	-	EXIT	B6/A700	
	1336-PRV	PRV		TO BE DETERMINED	REF. ELEVATION	REF. E2/A713
	1336A	EXIT	-	EXIT	B6/A700	
	1336B	RMA1	1336	STEAM LAB	A1/A700	



B6 CLASSROOM SANDBLAST GRAPHICS TYP.

SCALE: 1/4" = 1'-0"

KEY PLAN - MAIN LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH — BRENT P. WARD — 7067969 — LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

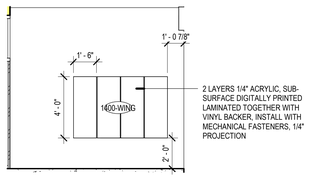
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SIGNAGE SCHEDULE + PLANS - LEVEL 1 - AREA 13

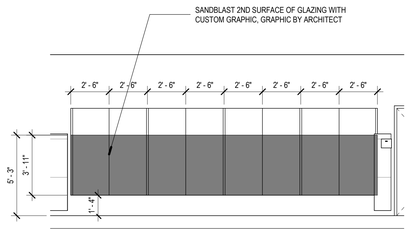
A713

11/27/2023 12:46:05 PM



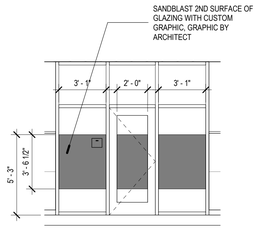
E1 1400 WING SIGNAGE

SCALE: 1/4" = 1'-0"



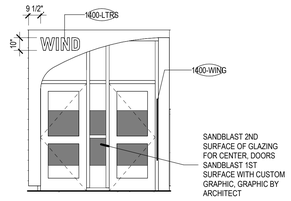
E2 STEAM LAB STANDBLAST

SCALE: 1/4" = 1'-0"



E3 TEACHER COLLAB 1408 SANDBLAST

SCALE: 1/4" = 1'-0"

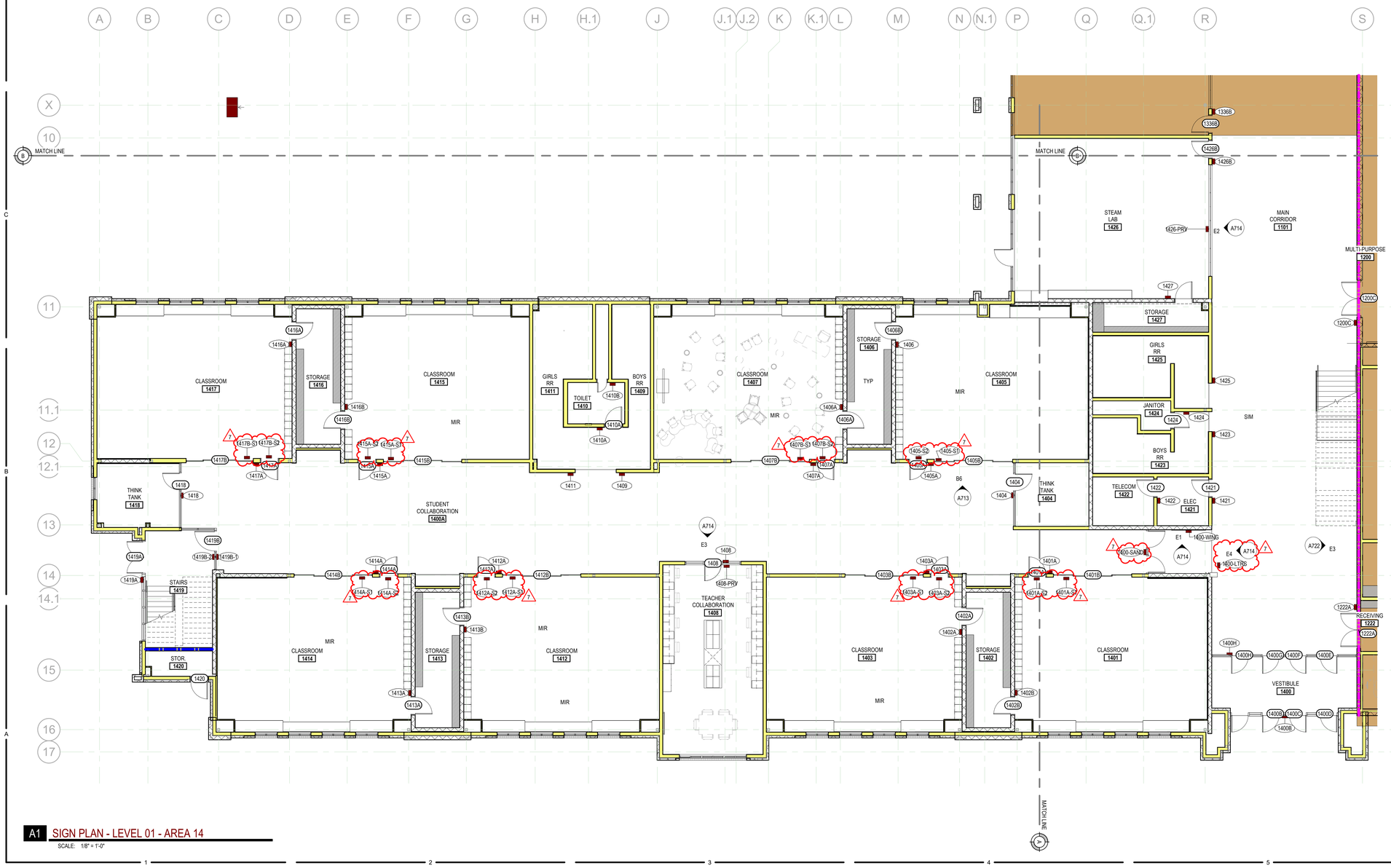


E4 1400 WING LETTERS & SANDBLAST

SCALE: 1/4" = 1'-0"

SIGNAGE SCHEDULE - LEVEL 01 - ARE 14

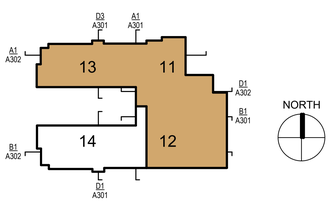
Mark	Sign Type	Sign Rm#	Sign Text	Detail	Sign Notes
1400-LTRS	LTRS		WIND	B3/A700	10" TALL X 3/4" RETURNS, REF. E4/A714
1400-SAN	SAND		TO BE DETERMINED	E4/A712	REF. E4/A714
1400-WING	WING			E3/A700	REF. E1/A714
1400B	SECR	-	TYP.	C5/A700	
1400H	EXIT		EXIT	B6/A700	
1401A	RMA2	1401	CLASSROOM	A2/A700	
1401A-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1401A-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1402A	RMB	1402	STORAGE	A2/A700	
1402B	RMB	1402	STORAGE	A3/A700	
1403A	RMA2	1403	CLASSROOM	A2/A700	
1403A-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1403A-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1404	RMA1	1404	THINK TANK	A1/A700	
1405-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
1405-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
1405A	RMA2	1405	CLASSROOM	A2/A700	
1406	RMB	1406	STORAGE	A3/A700	
1406A	RMB	1406	STORAGE	A3/A700	
1407A	RMA2	1407	CLASSROOM	A2/A700	
1407B-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1407B-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1408	RMA1	1408	TEACHER COLLAB	A1/A700	
1408-PRV	SAND		TO BE DETERMINED	E4/A712	REF. E3/A714
1409	MN	1409	BOY'S RESTROOM	B2/A700	
1410A	UNI	1410	RESTROOM	B3/A700	
1410B	RMB	1410B	CHASE	A3/A700	
1411	WM	1411	GIRL'S RESTROOM	B1/A700	
1412A	RMA2	1412	CLASSROOM	A2/A700	
1412A-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1412A-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1413A	RMB	1413	STORAGE	A3/A700	
1413B	RMB	1413	STORAGE	A3/A700	
1414A	RMA2	1414	CLASSROOM	A2/A700	
1414A-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1414A-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1415A	RMA2	1415	CLASSROOM	A2/A700	
1415A-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1415A-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1416A	RMB	1416	STORAGE	A3/A700	
1416B	RMB	1416	STORAGE	A3/A700	
1417A	RMA2	1417	CLASSROOM	A2/A700	
1417B-S1	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1417B-S2	SAND		SANDBLAST PATTERN	E4/A712	REF. B6/A713
1418	RMA1	1418	THINK TANK	A1/A700	
1419A	SECR	-	TYP.	C5/A700	
1419B-1	SID	-	STAIRS EXIT	C2/A700	
1419B-2	RMB	-	LEVEL 1	A3/A700	
1421	RMB	1421	ELECTRICAL	A3/A700	
1422	RMB	1422	TELECOM	A3/A700	
1423	MN	1423	BOY'S RESTROOM	B2/A700	
1424	RMB	1424	JANITOR	A3/A700	
1425	WM	1425	GIRL'S RESTROOM	B1/A700	
1426-PRV	PRV		TO BE DETERMINED	REF. ELEVATION	
1426B	RMA1	1426	STEAM LAB	A1/A700	
1427	RMB	1427	STORAGE	A3/A700	



A1 SIGN PLAN - LEVEL 01 - AREA 14

SCALE: 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH
BRIAN SHEARER
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

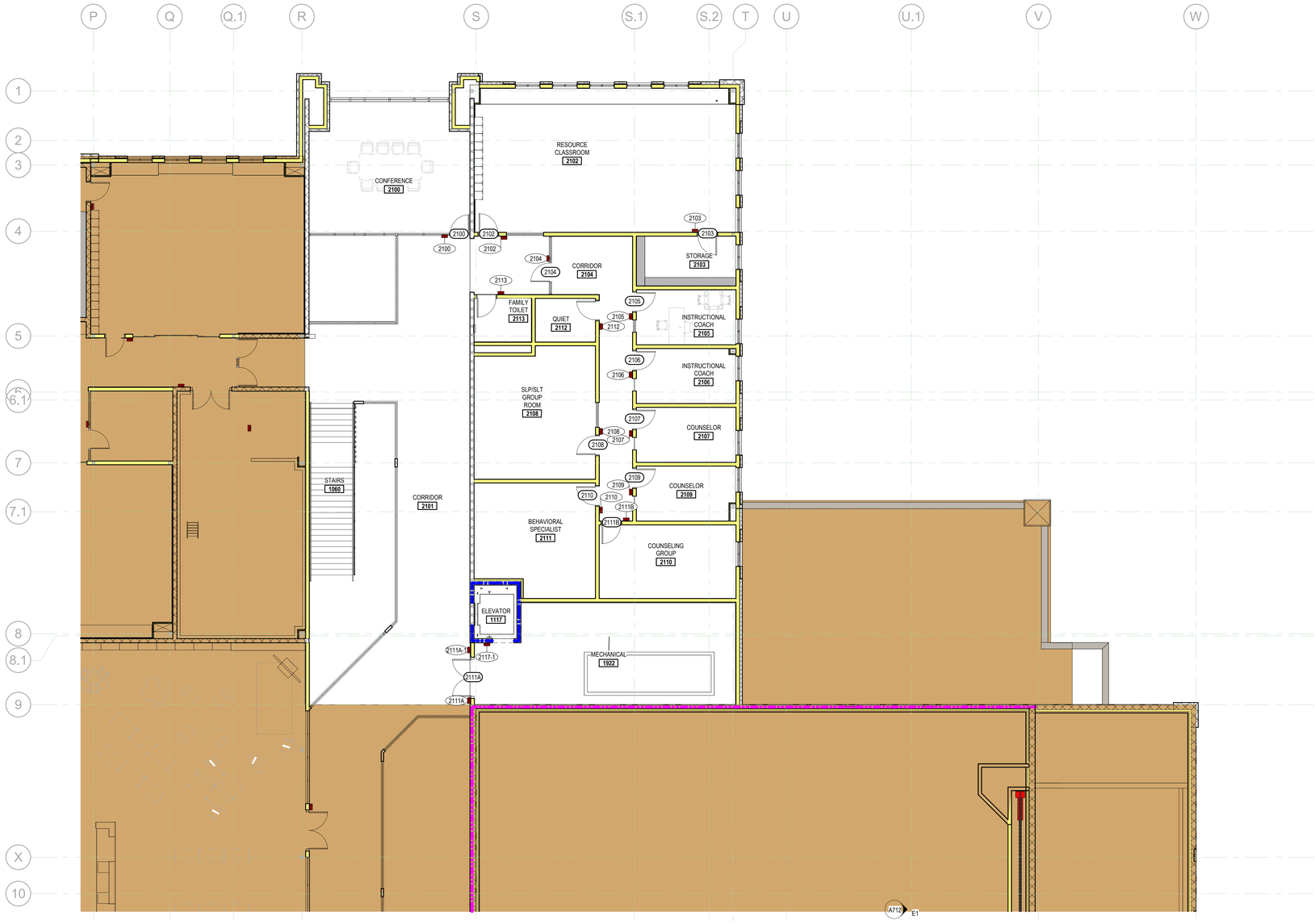
SIGNAGE SCHEDULE + PLANS - LEVEL 1 - AREA 14

A714

11/27/2023 12:46:15 PM

SIGNAGE SCHEDULE - LEVEL 02 - ARE 21

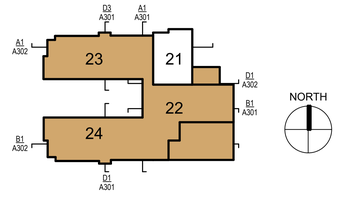
Mark	Sign Type	Sign Rm#	Sign Text	Detail	Sign Notes
2100	RMA1	2100	CONFERENCE	A1/A700	
2102	RMA2	2102	CLASSROOM	A2/A700	
2103	RMB	2103	STORAGE	A3/A700	
2104	RMA1	2104	OFFICES	A1/A700	
2105	RMA2	2105	OFFICE	A2/A700	
2106	RMA2	2106	OFFICE	A2/A700	
2107	RMA2	2107	OFFICE	A2/A700	
2108	RMA1	2108	GROUP	A1/A700	
2109	RMA2	2109	OFFICE	A2/A700	
2110	RMA2	2111	OFFICE	A2/A700	
2111A	RMB	1922	MECHANICAL	A3/A700	
2111A-1	ELEV	-	TYP.	A5/A700	
2111B	RMA2	2111	OFFICE	A2/A700	
2112	RMA1	2112	QUIET	A1/A700	
2113	FAM	2113	FAMILY RESTROOM	B4/A700	
2117-1	INT	-	ELEVATOR LEVEL 2	A4/A700	



A1 SIGN PLAN - LEVEL 02 - AREA 21

SCALE: 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
CHRISTOPHER D. REAY
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

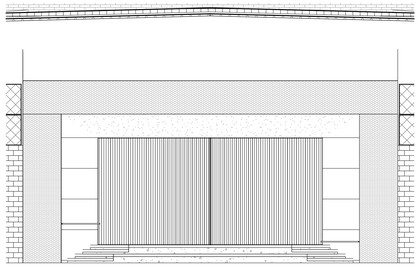
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

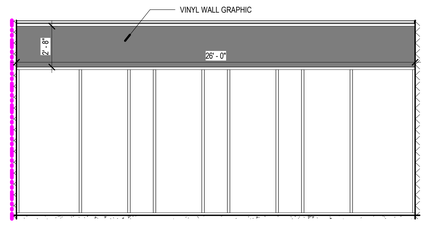
SIGNAGE SCHEDULE + PLANS - LEVEL 2 - AREA 21

A721

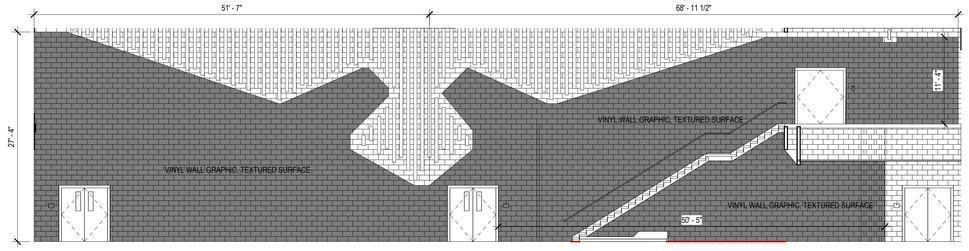
11/8/2023 10:32:26 PM



E1 PROSCENIUM SIGNAGE
SCALE: 1/8" = 1'-0"



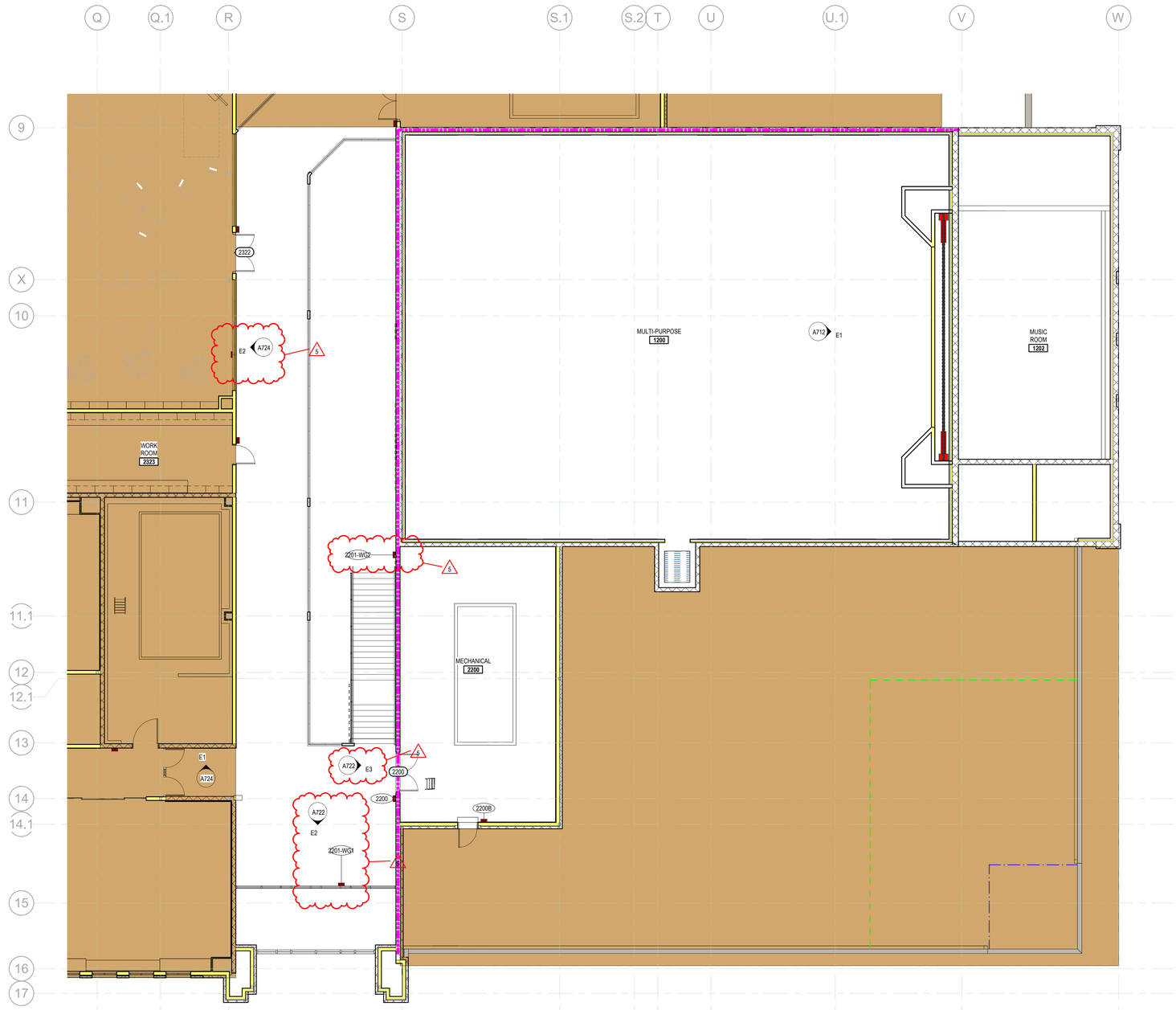
E2 WALL GRAPHICS COMMONS 1
SCALE: 1/4" = 1'-0"



E3 COMMONS WALL GRAPHIC 2
SCALE: 1/8" = 1'-0"

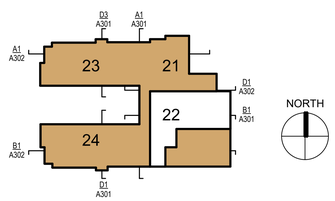
SIGNAGE SCHEDULE - LEVEL 02 - ARE 22

Mark	Sign Type	Sign Rm#	Sign Text	Detail	Sign Notes
2200	RMB	2200	MECHANICAL	A3/A700	
2200B	RMB		ROOF ACCESS	A3/A700	
2201-WG1	WG		VINYL WALL GRAPHIC	E1/A712	REF. E2/A722
2201-WG2	WG		VINYL WALL GRAPHIC	E1/A712	REF. E3/A722



1 SIGN PLAN - LEVEL 02 - AREA 22
SCALE: 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 16 2023

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BP5-ADDENDUM 01

OSD HILLCREST ELEMENTARY REBUILD

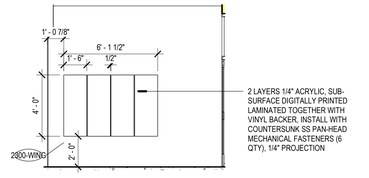
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SIGNAGE SCHEDULE + PLANS - LEVEL 2 - AREA 22

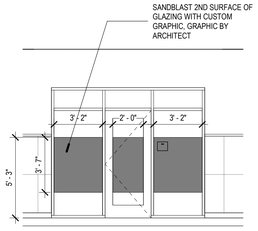
A722

11/17/2023 1:18:42 PM



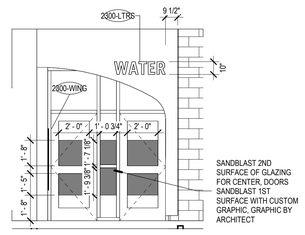
E1 2300 WING SIGNAGE

SCALE: 1/4" = 1'-0"



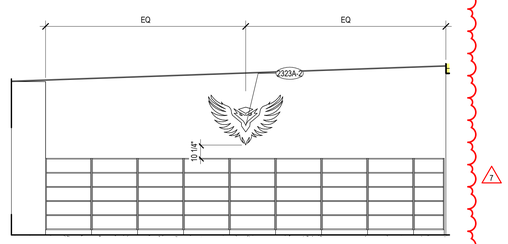
E2 TEACHER COLLABL 2308 SANDBLAST

SCALE: 1/4" = 1'-0"



E3 2300 WING LETTERS & SANDBLAST

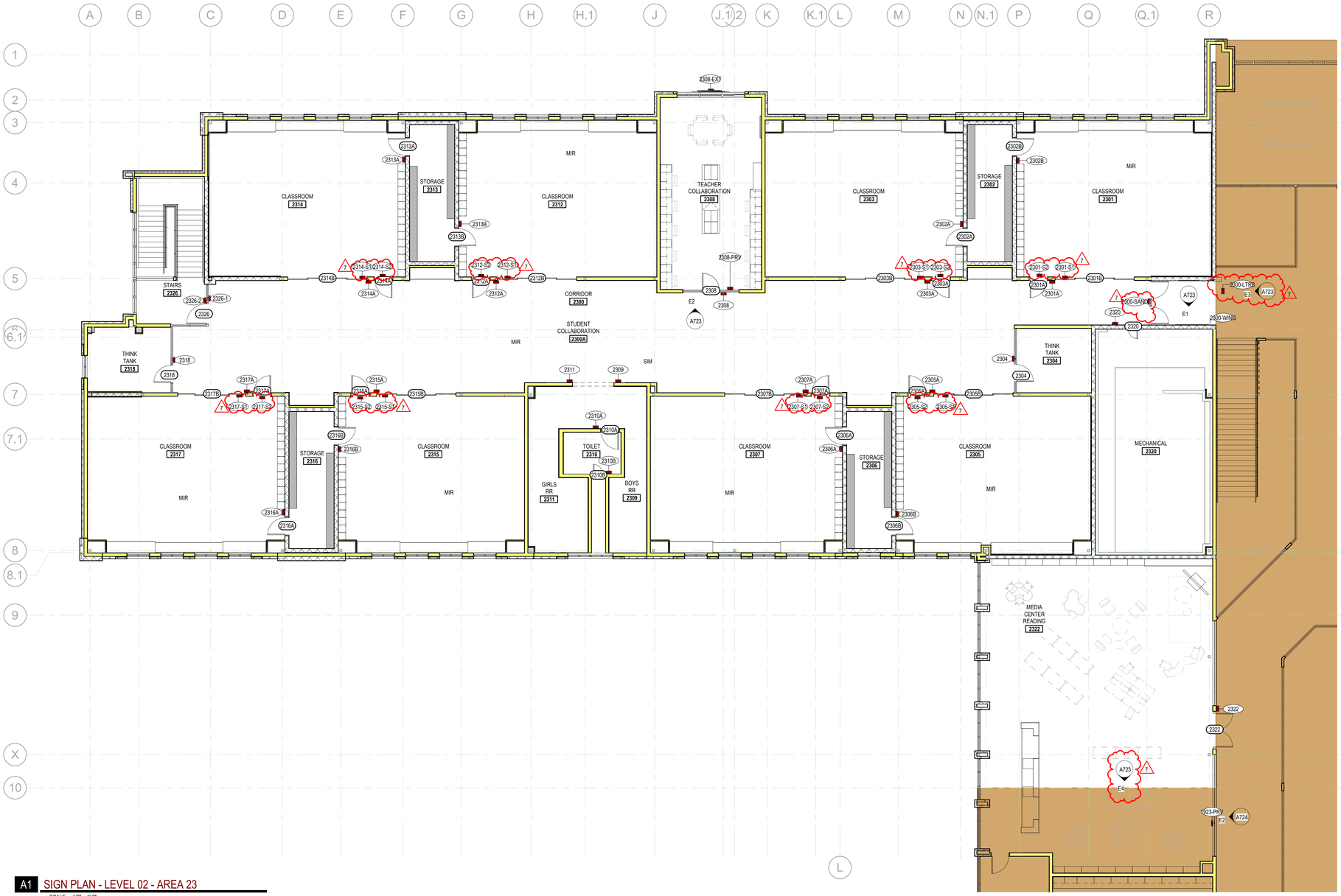
SCALE: 1/4" = 1'-0"



E4 MEDIA CENTER HAWK

SCALE: 1/4" = 1'-0"

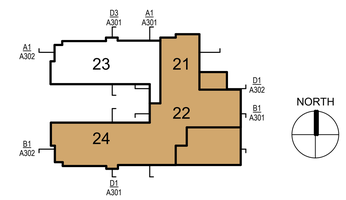
SIGNAGE SCHEDULE - LEVEL 02 - ARE 23					
Mark	Sign Type	Sign Rmk	Sign Text	Detail	Sign Notes
2300-LTRS	LTRS		WATER	E3/A700	10" TALL X 3/4" RETURNS, REF. E3/A723
2300-SAN	SAND		TO BE DETERMINED	E4/A712	REF. E2/A700
2300-WING	WING			E3/A700	REF. E1/A723
2301-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2301-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2301A	RMA2	2301	CLASSROOM	A2/A700	
2302A	RMB	2302	STORAGE	A3/A700	
2302B	RMB	2302	STORAGE	A3/A700	
2303-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2303-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2303A	RMA2	2303	CLASSROOM	A2/A700	
2304	RMA1	2304	THINK TANK	A1/A700	
2305-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2305-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2305A	RMA2	2305	CLASSROOM	A2/A700	
2306A	RMB	2306	STORAGE	A3/A700	
2306B	RMB	2306	STORAGE	A3/A700	
2307-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2307-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2307A	RMA2	2307	CLASSROOM	A2/A700	
2308	RMA1	2308	TEACHER COLLAB	A1/A700	
2308-EXT	CREST		CREST LOGO	D4/A700	REF. A1/A201
2308-PRV	PRV		TO BE DETERMINED	REF. ELEVATION	REF. E2/A723
2309	MN	2309	BOY'S RESTROOM	B2/A700	
2310A	UNI	2310	RESTROOM	B3/A700	
2310B	RMB	2310B	CHASE	A3/A700	
2311	WM	2311	GIRL'S RESTROOM	B1/A700	
2312-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2312-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2312A	RMA2	2312	CLASSROOM	A2/A700	
2313A	RMB	2313	STORAGE	A3/A700	
2313B	RMB	2313	STORAGE	A3/A700	
2314-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2314-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2314A	RMA2	2314	CLASSROOM	A2/A700	
2315-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2315-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2315A	RMA2	2315	CLASSROOM	A2/A700	
2316A	RMB	2316	STORAGE	A3/A700	
2316B	RMB	2316	STORAGE	A3/A700	
2317-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2317-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2317A	RMA2	2317	CLASSROOM	A2/A700	
2318	RMA1	2318	THINK TANK	A1/A700	
2320	RMB	2320	MECHANICAL	A3/A700	
2322	RMA1	2322	MEDIA CENTER	A1/A700	
2323A	RMA1	2323A	WORK ROOM	A1/A700	
2323A-2	HAWK			D1/A700	REF. E4/A723
2323B	RMA1	2323B	WORK ROOM	A1/A700	
2324	RMB	2324	STORAGE	A3/A700	
2326-1	SID	-	STAIR EXIT	C2/A700	
2326-2	RMB	-	LEVEL 2	A3/A700	



A1 SIGN PLAN - LEVEL 02 - AREA 23

SCALE: 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH
REGISTERED
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

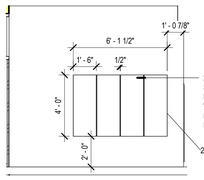
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SIGNAGE SCHEDULE + PLANS - LEVEL 2 - AREA 23

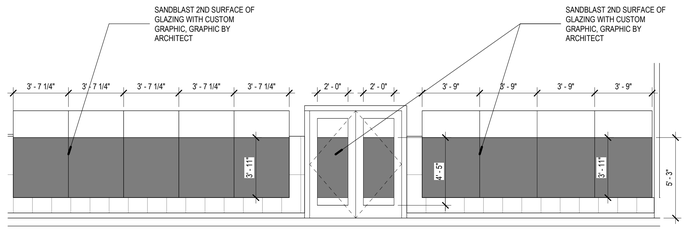
A723

11/27/2023 12:46:25 PM



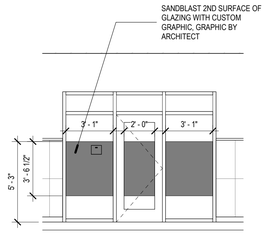
E1 2400 WING SIGNAGE

SCALE: 1/4" = 1'-0"



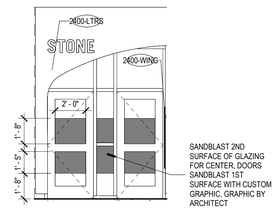
E2 MEDIA CENTER SANDBLAST

SCALE: 1/4" = 1'-0"



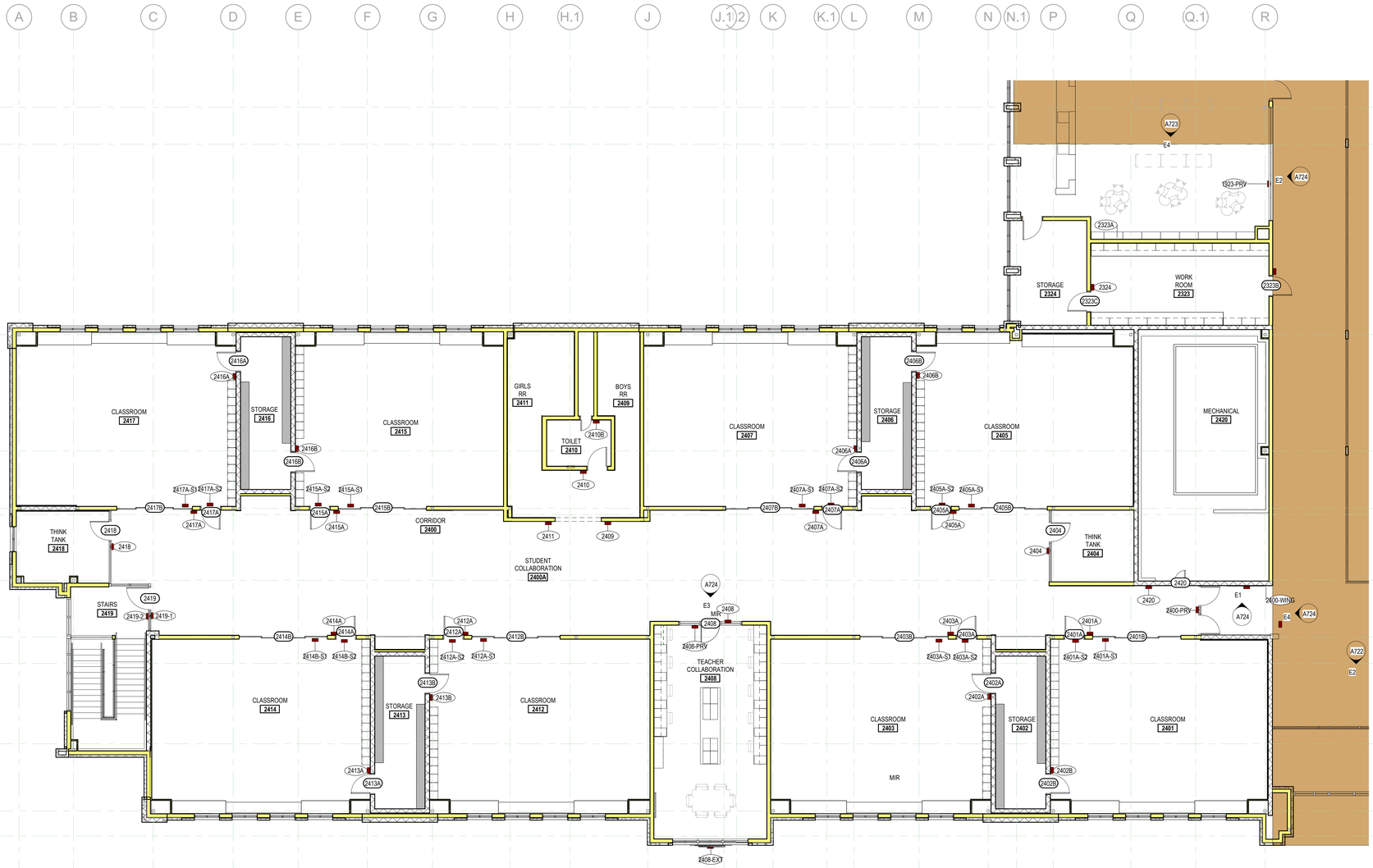
E3 TEACHER COLLAB 2408 SANDBLAST

SCALE: 1/4" = 1'-0"



E4 2400 WING LETTERS & SANDBLAST

SCALE: 1/4" = 1'-0"

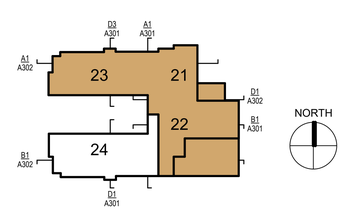


A1 SIGN PLAN - LEVEL 02 - AREA 24

SCALE: 1/8" = 1'-0"

SIGNAGE SCHEDULE - LEVEL 02 - ARE 24

Mark	Sign Type	Sign Rm#	Sign Text	Detail	Sign Notes
2400-LTRS	LTRS		STONE	B3/A700	10" TALL X 3/4" RETURNS
2400-PRV	PRV		TO BE DETERMINED	REF. ELEVATION	
2400-WING	WING			E3/A700	REF. E1/A724
2401A	RMA1	2401	CLASSROOM	A1/A700	
2401A-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2401A-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2402A	RMB	2402	STORAGE	A3/A700	
2402B	RMB	2402	STORAGE	A3/A700	
2403A	RMA1	2403	CLASSROOM	A1/A700	
2403A-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2403A-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2404	RMA1	2404	THINK TANK	A1/A700	
2405A	RMA1	2405	CLASSROOM	A1/A700	
2405A-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2405A-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2406A	RMB	2406	STORAGE	A3/A700	
2406B	RMB	2406	STORAGE	A3/A700	
2407A	RMA1	2407	CLASSROOM	A1/A700	
2407A-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2407A-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2408	RMA1	2308	TEACHER COLLAB	A1/A700	
2408-EXT	CREST		CREST LOGO	D4/A700	REF. B1/A204
2408-PRV	PRV		TO BE DETERMINED	REF. ELEVATION	REF. E3/A724
2409	MN	2409	BOYS	B2/A700	
2410	UNI	2410	RESTROOM	B3/A700	
2410B	RMB	2410B	CHASE	A3/A700	
2411	WM	2411	GIRLS	B1/A700	
2412A	RMA1	2412	CLASSROOM	A1/A700	
2412A-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2412A-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2413A	RMB	2413	STORAGE	A3/A700	
2413B	RMB	2413	STORAGE	A3/A700	
2414A	RMA1	2414	CLASSROOM	A1/A700	
2414A-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2414A-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2415A	RMA1	2415	CLASSROOM	A1/A700	
2415A-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2415A-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2416A	RMB	2416	STORAGE	A3/A700	
2416B	RMB	2416	STORAGE	A3/A700	
2417A	RMA1	2417	CLASSROOM	A1/A700	
2417A-S1	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2417A-S2	SAND		TO BE DETERMINED	E4/A712	REF. B6/A713
2418	RMA1	2418	THINK TANK	A1/A700	
2419-1	SID	-	STAIR EXIT	C2/A700	
2419-2	RMB	-	LEVEL 2	A3/A700	
2420	RMB	2420	MECHANICAL	A3/A700	



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 27 2023

STATE OF UTAH
SHEA RICE
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
8	00/00/2023	ASI-03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SIGNAGE SCHEDULE + PLANS - LEVEL 2 - AREA 24

A724

11/27/2023 12:46:34 PM

KEYED NOTES

201.1 EXISTING BUILDING, REMOVE IN ITS ENTIRETY

201.5 EXISTING PORTABLE BUILDING, PROTECT AS NECESSARY. CONTRACTOR TO UTILIZE THIS PORTABLE FOR CONSTRUCTION TRAILER. MAINTAIN POWER CONNECTION

203.1 EXISTING CONCRETE WALL AND FOOTINGS, REMOVE IN ITS ENTIRETY

204.1 EXISTING CONCRETE STAIR/RAMP, REMOVE IN ITS ENTIRETY

205.0 EXISTING CONCRETE SIDEWALK, PROTECT AS NECESSARY, REPAIR AS REQUIRED

205.1 EXISTING CONCRETE SIDEWALK TO BE REMOVED COMPLETELY

206.0 EXISTING CURB & GUTTER TO REMAIN, PROTECT AS NECESSARY, REPAIR AS REQUIRED

206.1 EXISTING CURB & GUTTER, REMOVE IN ITS ENTIRETY

207.0 EXISTING ASPHALT/CONCRETE PAVING, PROTECT AS NECESSARY, REPAIR AS REQUIRED

207.1 EXISTING ASPHALT/CONCRETE PAVING, REMOVE IN ITS ENTIRETY

E 208.1 EXISTING RETAINING/GRAVITY WALL, REMOVE IN ITS ENTIRETY

209.0 EXISTING CURB & SOFT FALL MATERIAL, REMOVE IN ITS ENTIRETY

210.0 EXISTING PLAY TOY, REMOVE IN ITS ENTIRETY

211.0 EXISTING BASKETBALL STANDARD, REMOVE IN ITS ENTIRETY

213.0 EXISTING COURTYARD PARK BENCH, REMOVE IN ITS ENTIRETY

214.0 EXISTING LANDSCAPING, PROTECT AS NECESSARY, REPAIR AS REQUIRED

215.0 EXISTING TREE, PROTECT AS NECESSARY. TREE TO BE WATERED & MAINTAINED DURING CONSTRUCTION & IS TO BE EXCLUDED FROM CONSTRUCTION OR STAGING ZONES. TREE WILL BE REPLACED AT CONTRACTORS EXPENSE SHOULD IT BE DAMAGED IN ANY WAY.

215.1 EXISTING TREE, REMOVE IN ITS ENTIRETY

217.1 EXISTING FENCE, REMOVE IN ITS ENTIRETY

218.0 EXISTING RAILING, REMOVE IN ITS ENTIRETY

219.0 EXISTING SWINGING GATE, REMOVE IN ITS ENTIRETY

221.0 EXISTING PLANTER, REMOVE IN ITS ENTIRETY

222.0 EXISTING MARQUEE, REMOVE IN ITS ENTIRETY. CONTRACTOR TO DISCONNECT

223.0 EXISTING FLAG POLE WITH ASSOCIATED FOOTING, REMOVE IN ITS ENTIRETY

224.0 EXISTING BACKSTOPS, REMOVE IN ITS ENTIRETY

225.0 EXISTING SOCCER GOALS, REMOVE IN ITS ENTIRETY

228.1 EXISTING RMP TRANSFORMER, REMOVE IN ITS ENTIRETY. CONTRACTOR TO COORDINATE WITH RMP DATE OF REMOVAL AND DISCONNECTION. CURRENT ESTIMATION IS JULY 1, 2023.

228.2 EXISTING RMP POWER POLE, REMOVE IN ITS ENTIRETY

228.3 EXISTING RMP POWER POLE W/ TELECOM BOX, REMOVE IN ITS ENTIRETY

228.4 EXISTING RMP POWER POLE W/ LIGHT, REMOVE IN ITS ENTIRETY

229.1 EXISTING METER, REMOVE IN ITS ENTIRETY

230.0 EXISTING ELECTRICAL MAIN SWITCHGEAR. DISCONNECT FROM UTILITY. DIVISION 26 CONTRACTO TO DISCONNECT ANY ELECTRICAL CIRCUITRY. CONTRACTOR TO PROTECT AND SALVAGE GEAR TO RETURN TO OWNER

234.0 EXISTING 6X6X4 CATCH BASIN, REMOVE IN ITS ENTIRETY, SEE CIVIL DEMO SHEETS FOR DETAILS

234.1 EXISTING 8X8X16 PUMICE BLOCK DRAINAGE WATER SUMP. APPROX. 8'-0" DIAMETER, DEPTH TBD

234.2 EXISTING GRAVEL DRAIN (INCLUDING 6" CONC. DRAIN), REMOVE IN ITS ENTIRETY. DEPTH TPD

D 235.0 EXISTING BOLLARD, REMOVE IN ITS ENTIRETY

237.0 EXISTING DUMPSTERS, PROTECT AS NECESSARY, RELOCATE. CONTRACTER TO COORDINATE W/ OWNER

238.0 EXISTING RECESSED DOCK AREA, REMOVE IN ITS ENTIRETY

239.0 EXISTING PIPE TUNNEL, REMOVE IN ITS ENTIRETY, 3'-10.5" X 4'-0" (4'-0.5" X 4'-0" TOP OF FOOTING (VARIES)) PER AS-BUILTS, SEE SHEET ADS500 FOR REFERENCE AS-BUILT "TYPICAL CLASSROOM SECTION", FIELD VERIFY

240.0 EXISTING MECHANICAL BASEMENT, REMOVE IN ITS ENTIRETY, SEE SHEET ADS500 FOR REFERENCE PHOTOS, FIELD VERIFY

241.0 EXISTING MASONRY MURAL(S), REMOVE, SALVAGED AND STORED FOR REINSTALLATION IN NEW BUILDING. CONTRACTOR TO PROTECT EXISTING MURAL(S) FROM DAMAGE OR WEATHER DURING DEMOLITION AND CONSTRUCTION UNTIL MASONRY MURAL(S) ARE FULLY INSTALLED IN NEW BUILDING. FIELD VERIFY LOCATIONS

242.0 EXISTING CHAINLINK GATE, PROTECT AS NECESSARY, REPAIR AS REQUIRED

GENERAL DEMOLITION NOTES

1. FIELD VERIFY DIMENSIONS AND CONDITIONS INCLUDING EXISTING UTILITIES PRIOR TO BIDDING. BRING DIFFERING DIMENSIONS AND CONDITIONS TO ARCHITECT'S ATTENTION PRIOR TO BIDDING.
2. A HAZARDOUS MATERIAL SURVEY IS AVAILABLE FROM THE OWNER. ABATEMENT MUST BE COMPLETED PRIOR TO DEMOLITION OF BUILDINGS OR BUILDING ELEMENTS.
3. PROVIDE DUSTPROOF ENCLOSURES AT PERIMETER OF CONSTRUCTION & DEMOLITION FOR PROTECTION OF ADJACENT SPACES.
4. BRING TO ARCHITECT'S ATTENTION EXISTING CONDITIONS THAT PRESENT ANY CODE VIOLATIONS, INCORRECT CONSTRUCTION OR SAFETY PROBLEMS.
5. PROTECT EXISTING STRUCTURE, FINISHES, AND SITE ELEMENTS NOT SCHEDULED FOR DEMOLITION. RESTORE DAMAGED ITEMS TO THEIR ORIGINAL CONDITION OR REPLACE AT CONTRACTOR'S EXPENSE.
6. REMOVE BUILDINGS TO BE DEMOLISHED IN THEIR ENTIRETY, INCLUDING CONCRETE FOOTINGS AND FOUNDATIONS. DISPOSE PER CITY REQUIREMENTS. FILL AS REQ'D BY GEO-TECHNICAL REPORT & COORDINATE W/ CIVIL DWGS.
7. REMOVE AND DISPOSE SELECTIVE DEMOLITION MATERIAL PER CITY REQUIREMENTS.
8. SALVAGE MATERIAL WHERE INDICATED. REMOVE ITEMS FROM CURRENT LOCATIONS & PREPARE FOR TRANSPORT BY THE OWNER.
9. SAVE 1 PALETTE OF EXISTING BRICKS.
10. SEE ATTACHED LIST OF FURNISHINGS AND EQUIPMENT BEING REMOVED BY THE OWNER PRIOR TO CONSTRUCTION. ALL OTHER FURNISHINGS AND EQUIPMENT, ETC... LEFT IN THE BUILDING AT THE START OF CONSTRUCTION IS TO BE DEMOLISHED.
11. SEE ATTACHED DRAFT ASBESTOS REPORT FOR INFORMATIONAL PURPOSES ONLY. THE OWNER WILL HAVE ASBESTOS ABATEMENT COMPLETE PRIOR TO THE START OF CONSTRUCTION

GENERAL SITE DEMOLITION NOTES

1. REFER TO CIVIL AND ELECTRICAL SITE PLANS FOR ADDITIONAL DEMOLITION WHICH IS REQUIRED.
2. FOR EXISTING UTILITIES TO BE REMOVED OR ABANDONED, CAP OR PLUG AND SEAL ENDS OF REMAINING PIPES OR OTHER CONDUITS.
   - SANITARY SEWER: CAP OR PLUG AND SEAL AT PROPERTY LINE.
   - CULINARY WATER: CAP OR PLUG AND SEAL AT MAIN PER CITY REQUIREMENTS; WORK SHALL BE WITNESSED BY AUTHORIZED CITY REPRESENTATIVE.
   - OVERHEAD POWER AND PHONE LINES: TERMINATE AT POLE PER UTILITY COMPANY REQUIREMENTS. *
3. REMOVING OR ABANDONING UTILITIES IN THE STREET SHALL INCLUDE NECESSARY TRAFFIC CONTROL, PAVEMENT SAW CUTTING, PAVEMENT DISPOSAL AND PAVEMENT RESTORATION AS PER CITY STANDARDS.
4. WHERE EXISTING DRIVEWAYS AND APRONS ARE REMOVED, SAW CUT SIDEWALK AT NEAREST JOINT. REPLACE SIDEWALK, CURB AND GUTTER PER CITY STANDARDS.
5. FIELD VERIFY LOCATION OF EXISTING SPRINKLER LINES AND CONTROLS IN LANDSCAPED AREAS AFFECTED BY DEMOLITION CONSTRUCTION. CAP OR REROUT LINES TO ACCOMMODATE LANDSCAPING UNAFFECTED BY CONSTRUCTION.

DEMOLITION LEGEND

- PROPERTY LINE
- HALF-TONE LINE DENOTES ITEMS TO REMAIN
- DASHED LINE DENOTES ITEMS TO BE DEMOLISHED
- EXISTING BUILDING TO BE REMOVED COMPLETELY
- AREA TO REMAIN UNDISTURBED DURING CONSTRUCTION

GENERAL ELECTRICAL DEMOLITION NOTES

1. DIVISION 26 SHALL VISIT THE SITE PRIOR TO BIDDING. BIDS SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS. BIDDERS SHALL EXAMINE THE SITE AND THE COMPLETE SET OF PLANS AND SPECIFICATIONS COVERING THE ENTIRE PROJECT. THEY SHALL BECOME FULLY CONVERSANT WITH THE TYPE OF GENERAL CONSTRUCTIONS AS WELL AS ALL PERTINENT FACTS AFFECTING THE COST OF CARRYING OUT THE WORK THEY WILL CONTRACT TO PERFORM. DIVISION 26 SHALL COORDINATE PROJECT PHASING WITH THE GENERAL CONTRACTOR AND BID PERFORM RESPONSIBILITIES FOR THIS PROJECT TO CONTRACT EXPECTATIONS.
2. DIVISION 26 SHALL CONFIRM EXACT LOCATION OF EXISTING AND NEW EQUIPMENT WITH OWNERS. ROUGH-IN LOCATIONS ARE DIAGRAMMATICALLY SHOWN ON THE DRAWINGS. EXISTING ELECTRICAL FIXTURES, DEVICES, EQUIPMENT, CIRCUITING AND/OR CONDITIONS ARE NOT SPECIFIED UNLESS NOTED ON DRAWINGS. FINAL ROUTING OF THE CONDUITS, CIRCUITING, AND CABLING SHALL BE DETERMINED BY THE CONTRACTOR AND CLOSELY COORDINATED WITH OWNER. ALL EXISTING CONDITIONS MUST BE VERIFIED WITHOUT EXCEPTION.
3. COORDINATE DEMOLITION AND PROJECT PHASING REQUIREMENTS WITH THE ENTIRE CONSTRUCTION SET AND GENERAL CONTRACTOR. PROVIDE SELECT DEMOLITION OF ELECTRICAL APPARATUSES IN AREAS SHOWN FOR DEMOLITION. MAKE DEMOLITION AREAS SAFE AS REQUIRED. LEAVE ALL EXISTING EQUIPMENT IN PORTIONS OF THE BUILDING, SITE, AND CAMPUS NOT BEING REMODELED AND AREAS NOT YET DEMOLISHED IN WORKING.
4. THE OWNER HAS THE RIGHT TO RETAIN ALL SALVAGEABLE MATERIAL. ANY MATERIAL THE OWNER CHOOSES NOT TO ACCEPT SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR.
5. ELECTRICAL UTILITY SERVICE FROM ROCKY MOUNTAIN POWER (RMP) HAS BEEN GENERALLY COORDINATED AND GENERAL DIRECTION GIVEN HEREIN. DIVISION 26 RESPONSIBLE TO COMPLETELY COORDINATE THE EXACT PATHWAYS AND REQUIREMENTS WITH RMP PRIOR TO ROUGH-IN. COORDINATE ALL ROUGH-IN AND INSTALLATION REQUIREMENTS WITH LATEST RMP ELECTRICAL SERVICE REQUIREMENTS AND CONTACT PERSON PROVIDED ON PLANS. ELECTRICAL CONTRACTOR TO COORDINATE REMOVAL OF EXISTING POWER POLES, LIGHT POLES, SWITCHGEAR AND TRANSFORMER WITH ROCKY MOUNTAIN POWER. CONTRACTOR TO COORDINATE WITH GC TO DETERMINE FINAL TEMPORARY POWER FOR SITE.
6. TELCO UTILITY SERVICE FROM LUMEN HAS BEEN GENERALLY COORDINATED AND GENERAL DIRECTION GIVEN HEREIN. DIVISION 26 RESPONSIBLE TO COMPLETELY COORDINATE THE EXACT PATHWAYS AND REQUIREMENTS WITH PROVIDERS AND OWNER PRIOR TO ROUGH-IN. COORDINATE ALL ROUGH-IN AND INSTALLATION REQUIREMENTS WITH CONTACT PERSON PROVIDED ON PLANS. VERIFY ALL EQUIPMENT LOCATIONS ON AND OFF THE SITE NECESSARY FOR SERVICE CONNECTION. COORDINATE WITH ROCKY MOUNTAIN POWER AND LUMEN REGARDING JOINT POLE CONNECTION (POWER POLE # 168909).
7. TRENCHING AND BACKFILL: LOCATE AND PROTECT EXISTING UTILITIES AND OTHER UNDERGROUND WORK IN A MANNER WHICH WILL ENSURE THAT NO DAMAGE OR SERVICE INTERRUPTIONS WILL RESULT FROM EXCAVATING AND BACKFILLING. PERFORM EXCAVATION IN A MANNER WHICH PROTECTS WALLS, FOOTINGS, AND OTHER STRUCTURAL MEMBERS FROM BEING DISTURBED OR DAMAGED IN ANY WAY. BURIAL DEPTHS MUST COMPLY WITH NEC SECTION 300-5 (OR STATE OF UTAH REQUIREMENTS, WHICHEVER IS MORE STRINGENT), UNLESS NOTED OTHERWISE. PATCH AND REPAIR ROADS, PARKING AREAS, SIDEWALKS, CURBS, OTHER PAVED AREAS, PLANTING AND ANY OTHER DISTURBED AREAS CAUSED BY THE ELECTRICAL CONTRACTOR DURING CONSTRUCTION.
8. BORING. TRENCHING, ASPHALT CUTTING AND PATCH WORK BY DIVISION 26. ANY CONCRETE THAT NEEDS TO BE REMOVED TO COMPLETE WORK WILL BE THE RESPONSIBILITY OF DIVISION 26. SCHEDULING OF THE TRENCHING SHALL BE COORDINATED WITH OTHER TRADES AND APPROVED BY THE OWNER.

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STATE OF UTAH — DAVID VOLKMAN — 7067868 — LICENSED ARCHITECT

REV	DATE	DESCRIPTION
1	Date 1	ADDENDUM 001

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: MAY 15, 2023

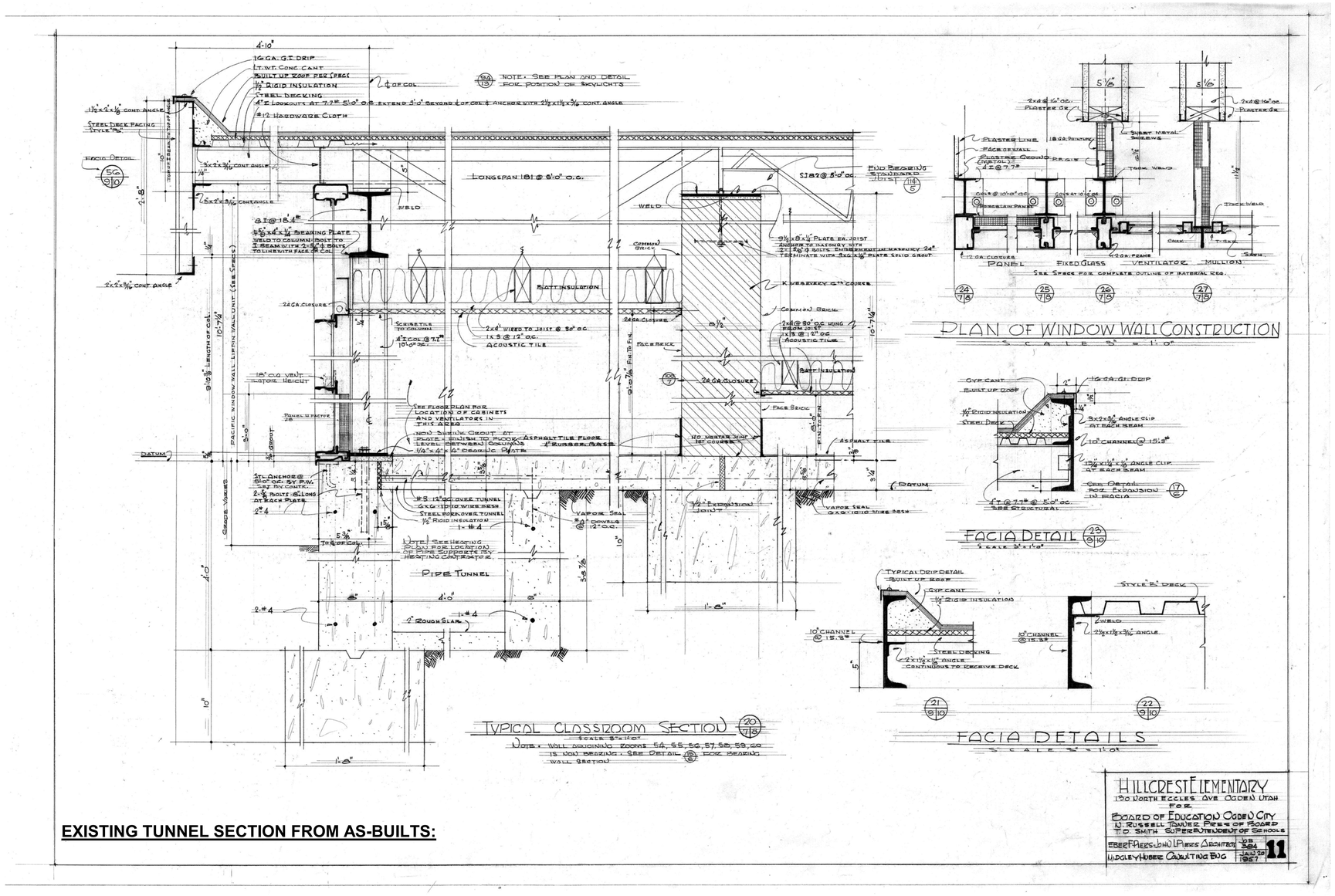
OSD HILLCREST ELEMENTARY REPLACEMENT

OGDEN SCHOOL DISTRICT
130 N. ECCLES AVE., OGDEN, UT 84404
DEMOLITION - BID PACKAGE 1

DEMOLITION PLAN - SITE

ADS101

A1 DEMOLITION PLAN - SITE
SCALE: 1" = 30'-0"



EXISTING TUNNEL SECTION FROM AS-BUILTS:

EXISTING BRICK ART/RELEIF PHOTOS

EXISTING BOILER ROOM PHOTOS

VCBO ARCHITECTURE
524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.575.8600
VCBO.COM

STATE OF UTAH
JOSEPH S. SWAN
7067969
LICENSED ARCHITECT

REV	DATE	DESCRIPTION

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: MAY 15, 2023

OSD HILLCREST ELEMENTARY REPLACEMENT

OGDEN SCHOOL DISTRICT
130 N. ECCLES AVE., OGDEN, UT 84404
DEMOLITION - BID PACKAGE 1

SITE DEMO DETAILS

ADS500

SIGN SCHEDULE - SITE

Mark	Type Mark	Sign Text	Type Comments	Sign Notes
S01-01	#1	BUS DROP ENTRY	D1/AS501	
S01-02	#1	BUS DROP ENTRY	D1/AS501	
S02-01	#2	AUTO DROP ENTRY	D1/AS501	
S02-02	#2	AUTO DROP ENTRY	D1/AS501	
S03-01	#3	ONE WAY DO NOT ENTER	D1/AS501	
S03-02	#3	ONE WAY DO NOT ENTER	D1/AS501	
S03-03	#3	ONE WAY DO NOT ENTER	D1/AS501	
S03-04	#3	ONE WAY DO NOT ENTER	D1/AS501	
S03-05	#3	ONE WAY DO NOT ENTER	D1/AS501	
S03-06	#3	ONE WAY DO NOT ENTER	D1/AS501	
S04-01	#4	MAINTENANCE AND DELIVERIES ONLY	D1/AS501	
S05-01	#5	DROP OFF ONLY, NO PARKING	D1/AS501	
S05-02	#5	DROP OFF ONLY, NO PARKING	D1/AS501	
S06-01	#10	THRU TRAFFIC THIS LANE ONLY	D1/AS501	
S07-01	#7	FIRE LANE	D1/AS501	
S07-02	#7	FIRE LANE	D1/AS501	
S08-01	#8	ONE WAY DO NOT ENTER	D1/AS501	
S08-02	#8	ONE WAY DO NOT ENTER	D1/AS501	
S09-01	#9	STOP	D1/AS501	
S09-02	#9	STOP	D1/AS501	
S09-03	#9	STOP	D1/AS501	
S09-04	#9	STOP	D1/AS501	
S09-05	#9	STOP	D1/AS501	
S09-06	#9	STOP	D1/AS501	
S09-07	#9	STOP	D1/AS501	
S10-01	#10	ADA RESERVED	D1/AS501	
S10-02	#10	ADA RESERVED	D1/AS501	
S10-03	#10	ADA RESERVED	D1/AS501	
S11-01	#11	ADA RESERVED, VAN ACCESSIBLE	D1/AS501	
S11-02	#11	ADA RESERVED, VAN ACCESSIBLE	D1/AS501	
S11-03	#11	ADA RESERVED, VAN ACCESSIBLE	D1/AS501	
S12-01	#12	ONE WAY	D1/AS501	
S12-02	#12	ONE WAY	D1/AS501	
S12-03	#12	ONE WAY	D1/AS501	
S12L-01	#12L	LEFT TURN ONLY	D1/AS501	(MOUNT BELOW)
S12L-02	#12L	LEFT TURN ONLY	D1/AS501	(MOUNT BELOW)
S12L-03	#12L	LEFT TURN ONLY	D1/AS501	(MOUNT BELOW)

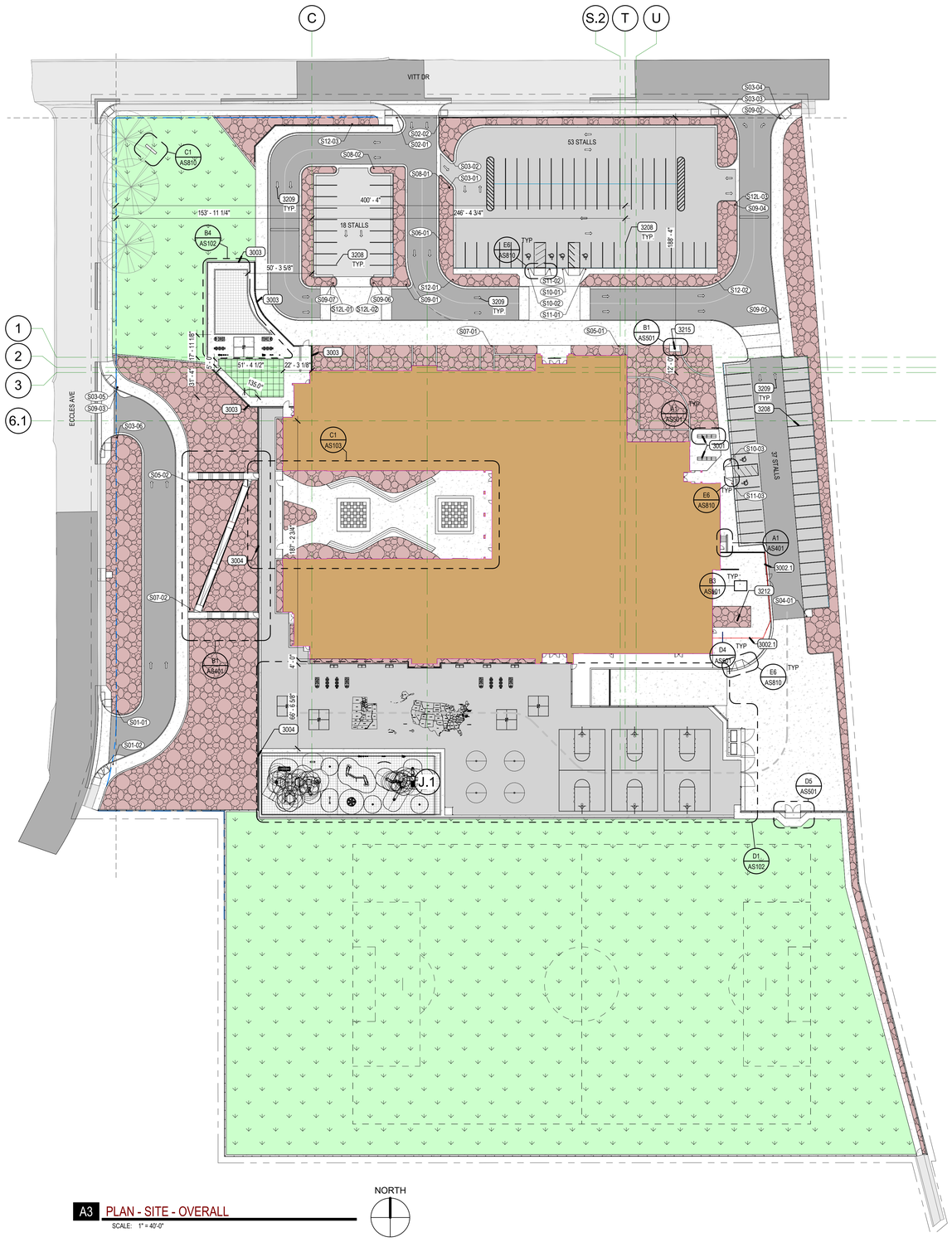
SITE MATERIALS LEGEND

- LAWN
- SYNTHETIC TURF
- COBBLE, REFER TO LANDSCAPING PLANS
- CONCRETE SIDEWALK
- LIGHT PAVING
- HEAVY PAVING
- POURED IN PLACE RUBBER SURFACING WITH FALL PROTECTION

PARKING STALLS

VAN ACCESSIBLE	6
STANDARD	102
TOTAL PARKING CAPACITY	108

NOTE: LOCATE (1) CONSTRUCTION SIGNS AS DIRECTED BY ARCHITECT.



A3 PLAN - SITE - OVERALL

SCALE: 1" = 40'-0"

NORTH

GENERAL SITE PLAN NOTES

1. GRADING AT THE BUILDING SHALL HAVE A 5% MINIMUM SLOPE AWAY FROM THE BUILDING FOR A MINIMUM OF 10'-0", UNO. CONCRETE SHALL BE SLOPED 2% AWAY FROM BUILDING. IBC 2012 SECTION 1804.3
2. FOUNDATION TO BE 6" ABOVE FINISHED GRADE UNO. (8" FOR DFCM PROJECT, ALSO REVIEW IBC 2012 SECTION 1808)
3. ALL CONNECTIONS FROM CITY STREETS TO THE BUILDING ARE TO BE PROVIDED UNDER THIS CONTRACT. CONTRACTOR TO VERIFY CITY STANDARDS FOR ROAD, CURB, UTILITY AND SIGNAGE REQUIREMENTS.
4. ALL EXTERIOR SIDEWALKS, STAIRS AND LANDINGS TO HAVE POSITIVE DRAINAGE BUT NO MORE THAN A MAXIMUM OF 1/4" SLOPE PER FOOT TO ALLOW POSITIVE DRAINAGE. ALL STAIRS AND RAMPS TO HAVE A LANDING OF 48 INCHES LONG AT THE TOP AND BOTTOM WITH A MAXIMUM SLOPE OF 1/4" PER FOOT. ALL REBAR IN EXTERIOR APPLICATIONS TO BE EPOXY COATED.
5. ALL HARDSCAPE TO BE A MINIMUM OF 4" THICK AIR ENTRAINED CONCRETE OVER 6" ROAD BASE, UNO, AND ALL SIDEWALKS SHALL BE NO LESS THAN 5'-0" WIDE.
6. FINISH GRADE OF SOFTSCAPE SHALL BE 2" UNIFORMLY BELOW PAVING SURFACES UNLESS NOTED OTHERWISE.
7. FINISH GRADE OF SOFTSCAPE SHALL BE 2" UNIFORMLY BELOW PAVING SURFACES UNLESS NOTED OTHERWISE.
8. 12" X 4" X CONTINUOUS MINIMUM CONCRETE MOW STRIP, TO BE PROVIDED AROUND ENTIRE BUILDING EXCEPT WHERE CONCRETE SIDEWALKS OR PLANTERS OCCUR, TYP. SEE DETAIL **XX/AXXX**.
9. LIGHT POLE BASE IN ALL LANDSCAPE LOCATIONS TO BE 6" ABOVE FINISHED GRADE, BE LOCATED AT LEAST 36" FROM FACE OF POLE BASE TO BACK OF CURB AND HAVE A CONCRETE MOW STRIP PER DETAIL **XX/AXXX**. VERIFY LOCATION ON SITE WITH ARCHITECT PRIOR TO ANY INSTALLATION.
10. LIGHT POLE BASE IN ALL PAVED LOCATIONS TO BE 36" ABOVE FINISHED GRADE. VERIFY LOCATION ON SITE WITH ARCHITECT PRIOR TO ANY INSTALLATION.
11. REMOTE FDC TO HAVE VAULT FOR DRAINAGE, SEE DETAIL **XX/AS/XX**.
12. COORDINATE ORIENTATION OF FIRE HYDRANT OUTLETS WITH THE FIRE MARSHALL'S OFFICE PRIOR TO THE FINAL INSTALLATION OF THE HYDRANT ASSEMBLY.

TREE PRESERVATION GUIDELINES + NOTES

1. FENCES WILL BE ERECTED TO PROTECT TREES TO BE PRESERVED. FENCES DEFINE A SPECIFIC PROTECTION ZONE FOR EACH TREE OR GROUP OF TREES. FENCE TO BE AT A MINIMUM OF 20' FROM TRUNK OR AT DRIP LINE OF TREE, WHICHEVER IS GREATER. FENCES ARE TO REMAIN UNTIL ALL SITE WORK HAS BEEN COMPLETED. FENCES MAY NOT BE RELOCATED OR REMOVED WITHOUT THE WRITTEN PERMISSION OF THE CONSULTING ARBORIST OR THE ARCHITECT.
2. INSIDE ALL PROTECTED TREE FENCE AREAS, CONTRACTOR TO PROVIDE WOOD CHIPS, MINIMUM 4" DEEP.
3. CONSTRUCTION TRAILERS AND TRAFFIC AND STORAGE AREAS MUST REMAIN OUTSIDE FENCED AREAS AT ALL TIMES.
4. ALL UNDERGROUND UTILITIES AND DRAIN OR IRRIGATION LINES SHALL BE ROUTED OUTSIDE THE TREE PROTECTION ZONE. IF LINES MUST TRAVERSE THE PROTECTION AREA, THEY SHALL BE TUNNELED OR BORED UNDER THE TREE(S).
5. NO MATERIALS, EQUIPMENT, SPOIL OR WASTE OR WASHOUT WATER MAY BE DEPOSITED, STORED OR PARKED WITHIN THE TREE PROTECTION ZONE (FENCED AREA).
6. ADDITIONAL TREE PRUNING REQUIRED FOR CLEARANCE OR TREE HEALTH DURING CONSTRUCTION MUST BE PERFORMED BY A QUALIFIED ARBORIST AND NOT BY CONSTRUCTION PERSONNEL.
7. ANY HERBICIDES PLACED UNDER PAVING MATERIALS MUST BE SAFE FOR USE AROUND TREES AND LABELED FOR THAT USE. ANY PESTICIDES USED ON SITE MUST BE TREE-SAFE AND NOT EASILY WASHED OFF SITE, CAUSING POLLUTION.
8. IF INJURY SHOULD OCCUR TO ANY TREE DURING CONSTRUCTION IT SHOULD BE EVALUATED AS SOON AS POSSIBLE BY THE CONSULTING ARBORIST OR LANDSCAPE ARCHITECT SO THAT APPROPRIATE TREATMENTS CAN BE APPLIED.
9. ANY GRADING, CONSTRUCTION, DEMOLITION, OR OTHER WORK THAT IS EXPECTED TO ENCOUNTER TREE ROOTS MUST BE MONITORED BY THE CONSULTING ARBORIST/LANDSCAPE ARCHITECT. ALL TREES NOT BEING REMOVED AS INDICATED ON LANDSCAPE DEMOLITION PLAN SHALL BE PROTECTED / MONITORED.
10. IRRIGATION WATER TO THE TREES AND SHRUBS TO REMAIN SHOULD BE AT LEAST 1 INCH A WEEK DURING GROWING SEASON UNTIL PROJECT COMPLETION (MAY - OCT) THIS WILL BE APPLIED WITH SPRINKLERS EVENLY OVER THE WHOLE ROOT SYSTEM, TWICE A WEEK TWO DAYS APART WITH 1/2 INCH OF WATER DELIVERED EACH WATERING CYCLE. NEWLY PLANTED PLANTS THAT HAVE NOT BECOME ESTABLISHED (2 YEARS OR LESS) WILL ALSO NEED IRRIGATION TO ENSURE THEIR SURVIVAL. IT IS RECOMMENDED THAT A TEMPORARY IRRIGATION SYSTEM BE DESIGNED ACCORDING TO THE VOLUME AND FLOW OF THE WATER SOURCE TO WATER THE PLANT MATERIAL.
11. EROSION CONTROL DEVICES SUCH AS SILT FENCING, DEBRIS, BASINS, AND WATER DIVERSION STRUCTURES SHALL BE INSTALLED TO PREVENT SILTATION AND OR EROSION WITHIN THE TREE PROTECTION ZONE.
12. ANY ROOTS DAMAGED DURING GRADING, TRENCHING OR CONSTRUCTION SHALL BE EXPOSED TO SOUND TISSUE AND CUT CLEANLY WITH A SAW. CONTRACTOR SHALL HAVE A QUALIFIED ARBORIST OR LANDSCAPE ARCHITECT OBSERVE THIS WORK.
13. IF TEMPORARY HAUL OR ACCESS ROADS MUST PASS OVER THE ROOT AREA OF TREES TO BE RETAINED, A ROADBED OF 6 INCHES OF COURSE WOOD CHIP MULCH SHALL BE CREATED TO PROTECT THE SOIL AND ROOTS. THE ROAD BED MATERIAL SHALL BE REPLENISHED AS NECESSARY TO MAINTAIN A 6-INCH DEPTH. UNDER NO CIRCUMSTANCES SHALL SUCH ACCESS ROADS BE USED ON A FREQUENT BASIS.
14. SPOIL OR SUBSOIL FROM TRENCHES, BASEMENTS, OR OTHER EXCAVATIONS SHALL NOT BE PLACED WITHIN THE TREE PROTECTION ZONE, EITHER TEMPORARILY OR PERMANENTLY.
15. MONITORING ONCE A MONTH SHALL OCCUR NOW AND FOR AT LEAST ONE YEAR AFTER CONSTRUCTION IS COMPLETED. CONTRACTOR SHALL HAVE A QUALIFIED ARBORIST PERFORM THIS TASK.
16. A SOIL SAMPLE SHALL BE SENT TO USU SOILS LAB TO DETERMINE IF ANY NUTRIENTS CAN BE ADDED TO HELP RELIEVE SOME STRESS TO THE TREES.

KEYED NOTES

3001	BIKE RACK
3002.1	6'-0" GALVANIZED CHAIN LINK FENCE
3003	6'-0" DECORATIVE IRON FENCE AND/OR GATE
3004	4'-0" DECORATIVE IRON FENCE AND/OR GATE
3208	PAINTED PARKING STRIPING
3209	PAINTED DIRECTIONAL ARROW AS INDICATED SEE HORIZONTAL CONTROL PLAN
3212	6" GRAVEL MULCH
3215	FLAG POLE

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
JASON B. SMITH
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

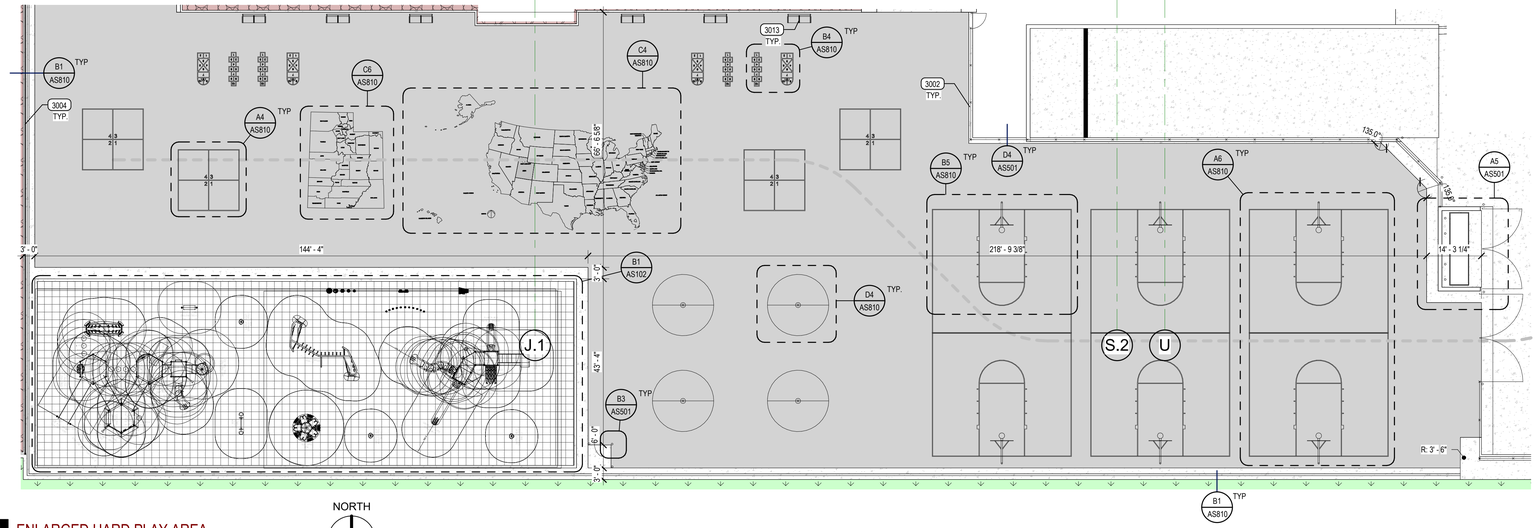
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

OVERALL SITE PLAN

AS101

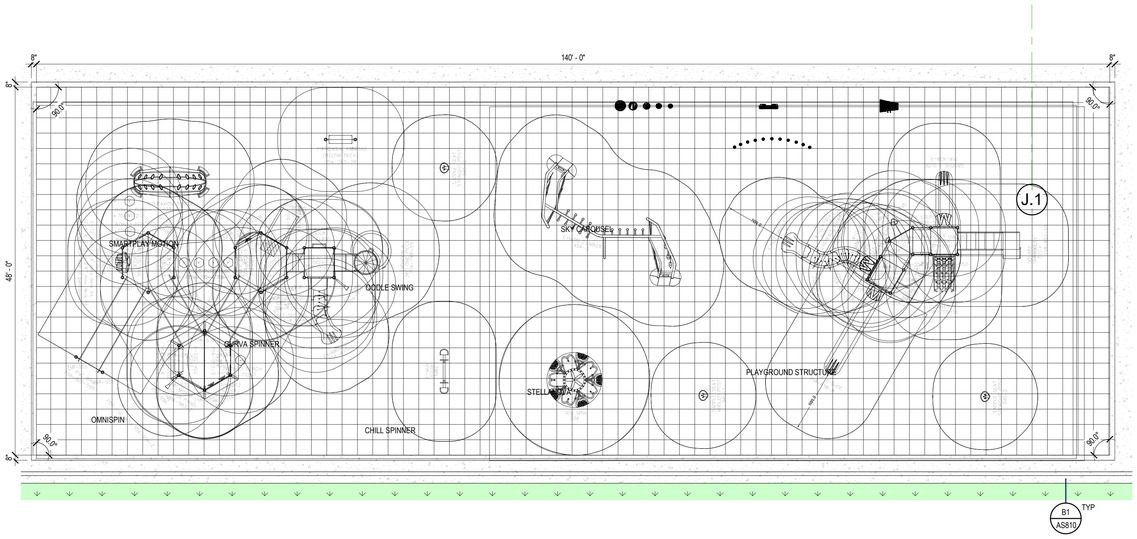
11/8/2023 10:38:41 PM



NORTH

D1 ENLARGED HARD PLAY AREA

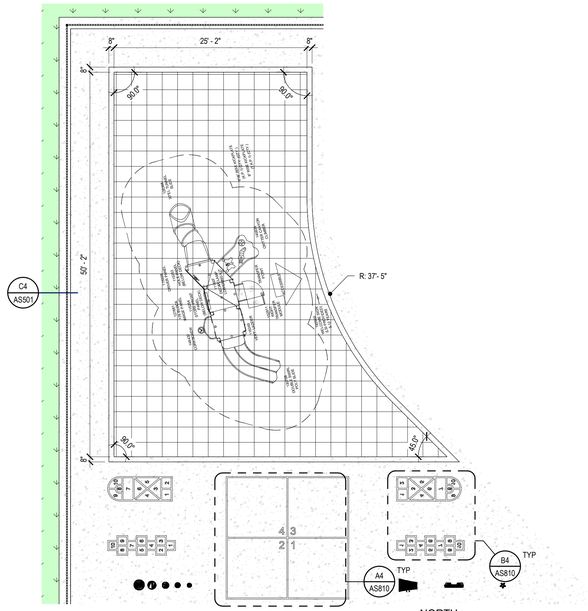
SCALE: 1/16" = 1'-0"



NORTH

B1 ENLARGED PLAY AREA

SCALE: 1/8" = 1'-0"



NORTH

B4 ENLARGED KINDERGARTEN PLAY AREA

SCALE: 1/8" = 1'-0"

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KEYED NOTES

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH · TROY GREENHALGH · 7067969 · LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

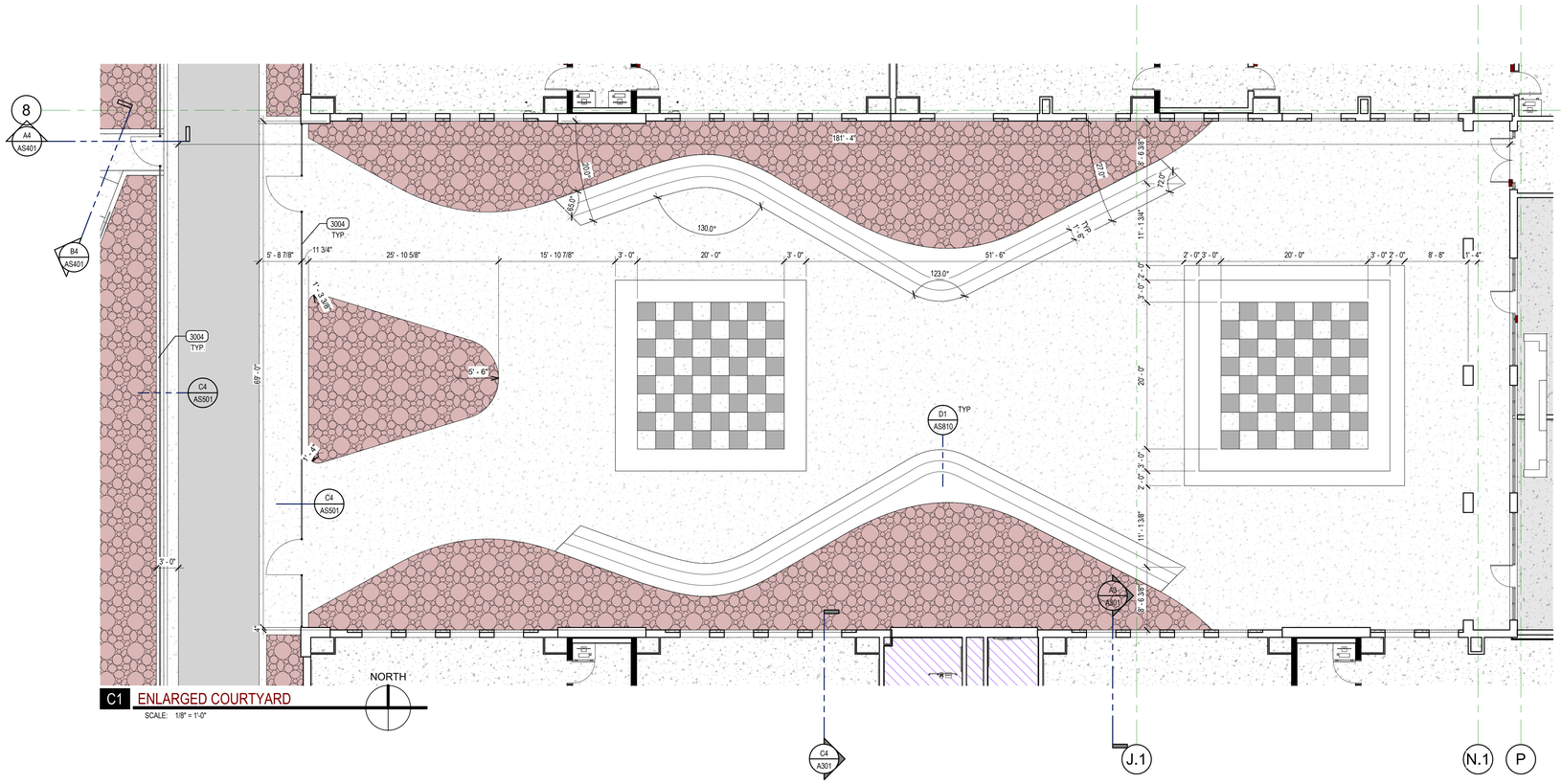
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED SITE PLANS

AS102

11/8/2023 10:39:13 PM



C1 ENLARGED COURTYARD

SCALE: 1/8" = 1'-0"

GENERAL SITE PLAN NOTES

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
BRADLEY A. WEBB
11/8/2023
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

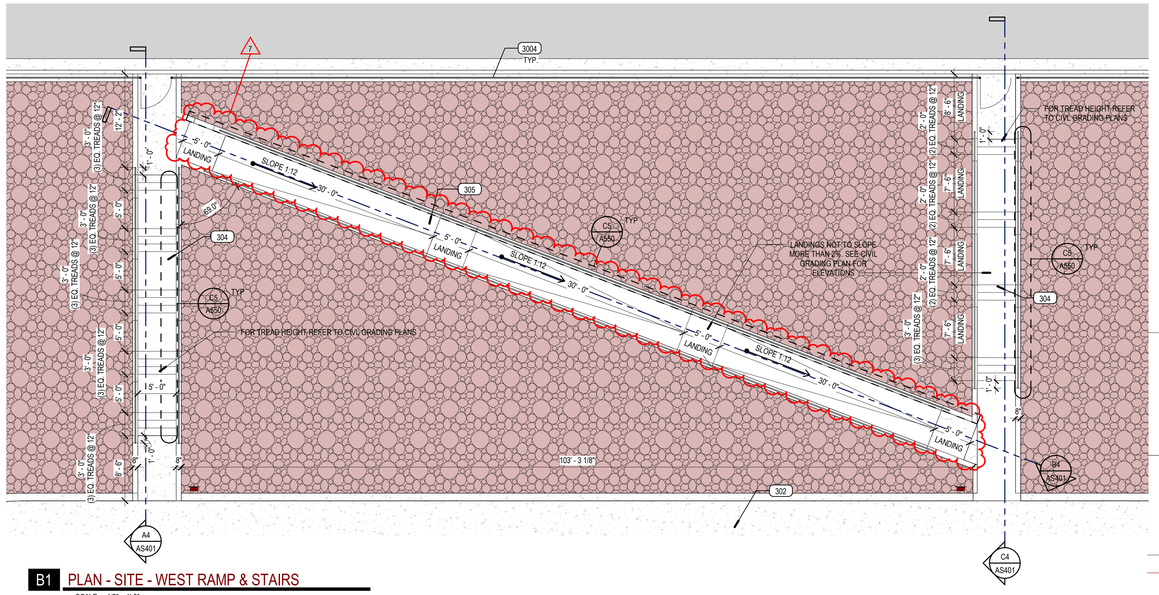
ENLARGED SITE PLANS

AS103

11/8/2023 10:39:16 PM

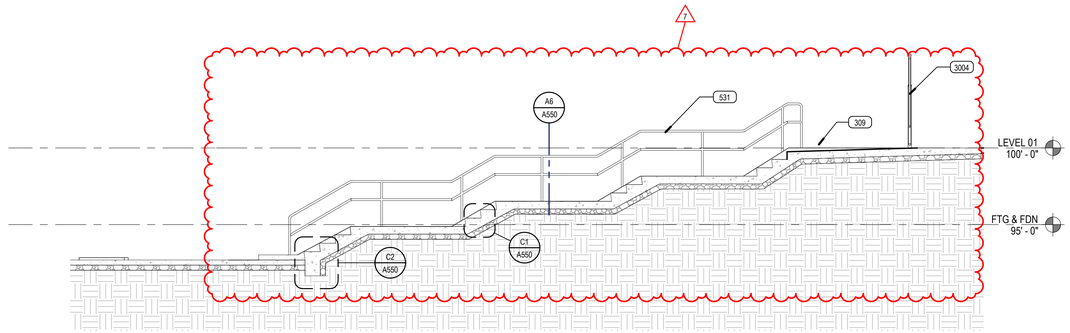
KEYED NOTES

302	REINFORCED CONCRETE SLAB
304	REINFORCED CONCRETE STAIRS
305	REINFORCED CONCRETE RAMP
309	ARCHITECTURAL GRADE FINISH CONCRETE WALL, SEALED
400	8"X8"X16" INTEGRAL COLOR CMU, HONED, TOOLED & BRUSHED HEAD & BED JOINTS
531	RAILING TYPE 7, FLOOR MOUNTED HANDRAIL, SEE DETAIL D6/ A550
3004	4'-0" DECORATIVE IRON FENCE AND/OR GATE



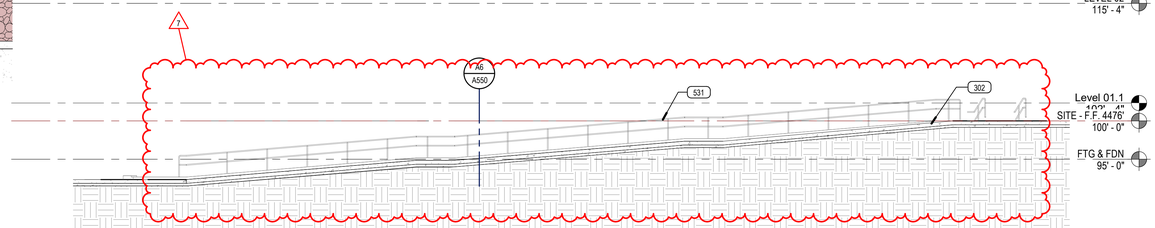
B1 PLAN - SITE - WEST RAMP & STAIRS

SCALE: 1/8" = 1'-0"



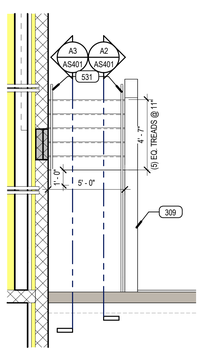
C4 Section 121

SCALE: 1/4" = 1'-0"



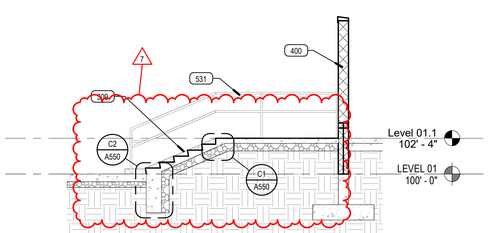
B4 Section 119

SCALE: 1/8" = 1'-0"



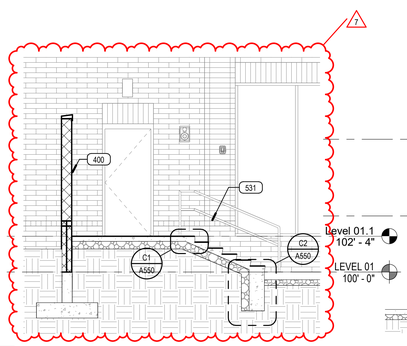
A1 PLAN - SITE - STAIR

SCALE: 1/4" = 1'-0"



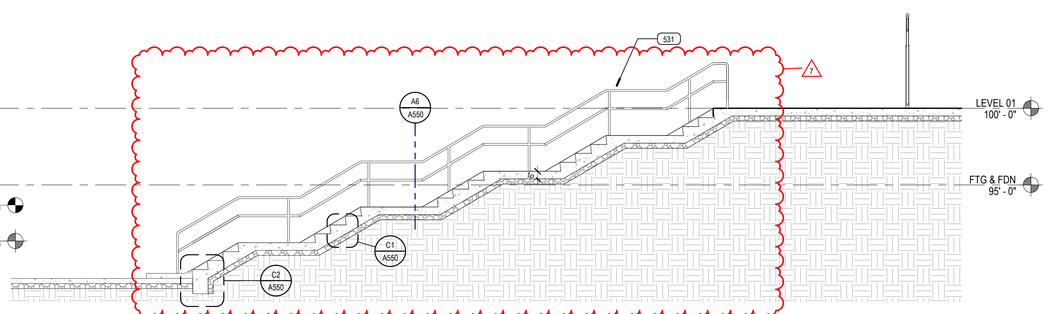
A2 SITE STAIR - SECTION 1

SCALE: 1/4" = 1'-0"



A3 Section 118

SCALE: 1/4" = 1'-0"



A4 Section 120

SCALE: 1/4" = 1'-0"

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REGISTERED
RYAN D. SMITH
7067969
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
5	11/16/2023	BPS-ADDENDUM 01
7	11/27/2023	BPS-ADDENDUM 03

OSD HILLCREST ELEMENTARY REBUILD

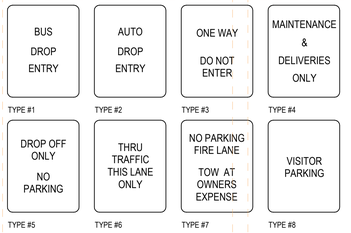
130 N. ECCLES AVE., OGDEN, UT 84404

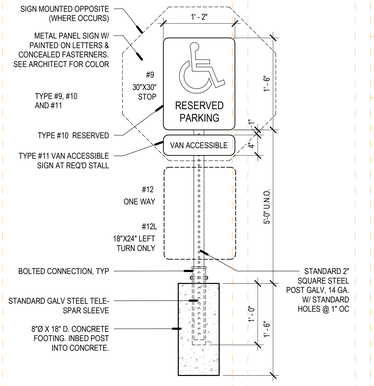
BID PACKAGE 5 - GENERAL CONSTRUCTION

SITE VERTICAL CIRCULATION

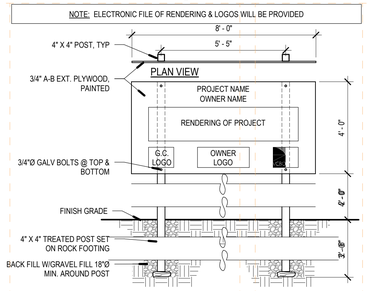
AS401

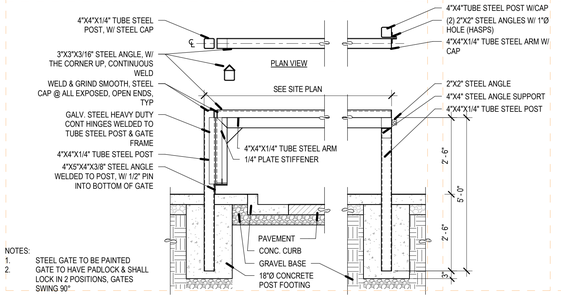
11/27/2023 12:43:49 PM



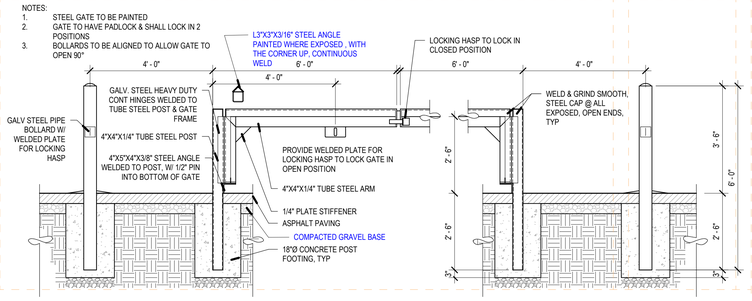


NOTE: ELECTRONIC FILE OF RENDERING & LOGOS WILL BE PROVIDED



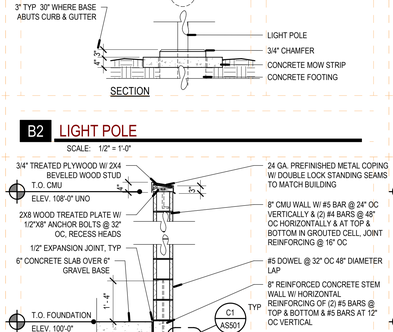


NOTES:
1. STEEL GATE TO BE PAINTED
2. GATE TO HAVE PADLOCK & SHALL LOCK IN 2 POSITIONS, GATES SWING 90°



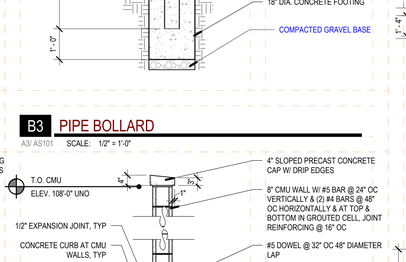
E2 CONSTRUCTION SIGN

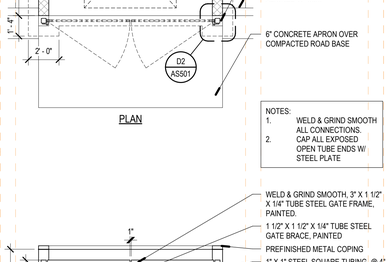
SCALE: 3/8" = 1'-0"



E3 GATE

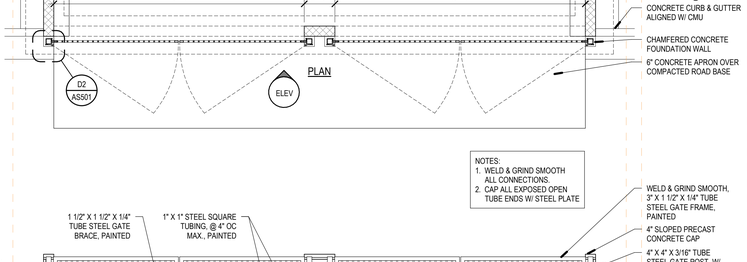
SCALE: 1/2" = 1'-0"





E5 SWING GATE - TYP

SCALE: 1/2" = 1'-0"



NOTE: ALL STEEL TO BE GALV.

HEIGHT OF FABRIC	DEPTH OF POSTS	LENGTH OF END CORNER OR PULL POSTS	LENGTH OF LINE POSTS	SIZE OF POSTS									
				END, CORNER & PULL POSTS				LINE POST MIN. SIZE				GATE POST MIN. SIZE FOR GATE 18' TO 24' WIDE	
				NOM. SIZE	OUTSIDE DIA.	PIPE WEIGHT ASTM A-120	PIPE WEIGHT TRIPLE COAT	NOM. SIZE	OUTSIDE DIA.	PIPE WEIGHT ASTM A-120	PIPE WEIGHT TRIPLE COAT	NOM. SIZE	OUTSIDE DIA.	PIPE WEIGHT ASTM A-120	PIPE WEIGHT TRIPLE COAT
6'	3'	9'	8'-8"	2"	2.375"	3.65	3.11	1 1/2"	1.900"	2.72	2.23	1 1/2"	1.625"	2.72	2.23

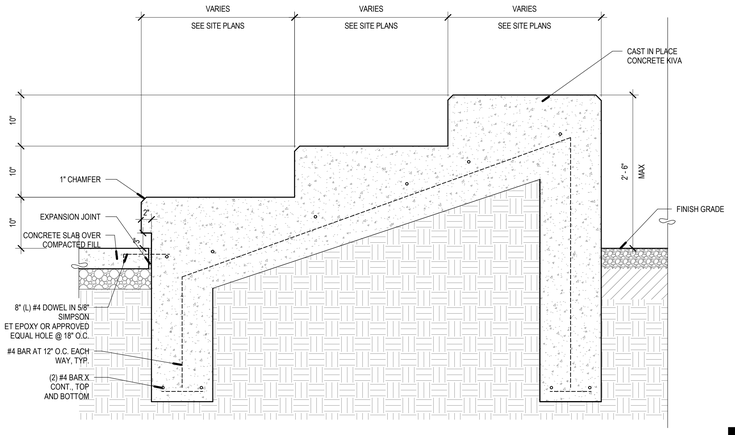
D1 SITE SIGNAGE

SCALE: 1" = 1'-0"

D2 GATE - JAMB - PLAN

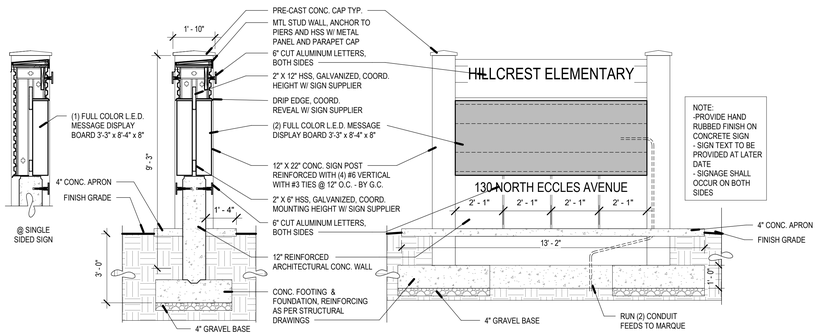
A4/ AS501 SCALE: 3" = 1'-0"

3/4" CHAMFER STRIP CONT
1 3/4" COVER MIN.
1/2" EXPANSION JOINT, TYP
CONCRETE SLAB OVER GRAVEL BASE
PLANTING AREA
(2) #5 BARS CONTINUOUS TOP & BOTTOM
#4 BARS HORIZONTAL @ 18" OC MIN. PLACED EQUALLY
#5 BARS @ 18" OC VERTICAL W/ J-HOOK AT FOOTING
2" DIAM. PVC PIPE @ 48" OC
#4 REBAR CROSSWIRE @ 24" OC, TOP & BOTTOM
#5 BARS @ 18" OC CONT W/ MIN. OF 3 BARS
6" GRAVEL BED
1'-6" MIN.
1'-0" CONC. FOOTING
3" CLR
3" CLR
6" CLR
6" CLR
3" CLR
3" CLR
3



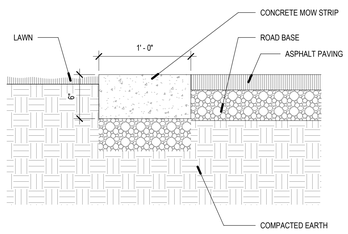
D1 CONCRETE KIVA DETAIL

SCALE: 1" = 1'-0"



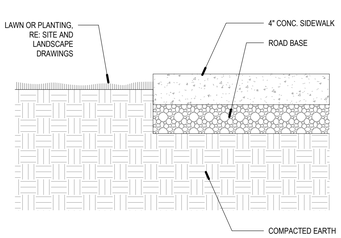
C1 SCHOOL MONUMENT SIGN SECTION AND ELEVATION

SCALE: 3/8" = 1'-0"



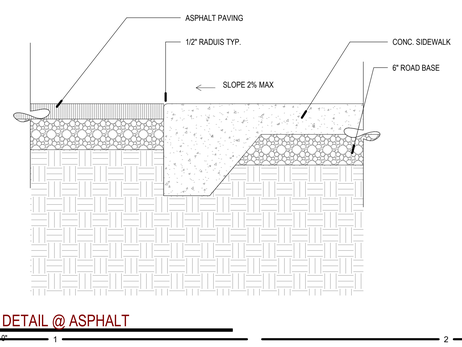
B1 ASPHALT EDGE LAWN

SCALE: 1 1/2" = 1'-0"



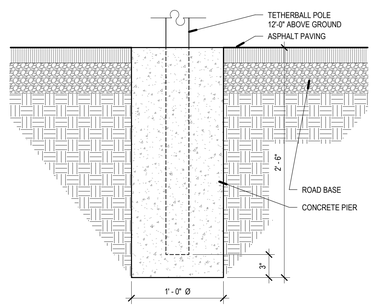
B2 CONC. EDGE LAWN OR PLANTING

SCALE: 1 1/2" = 1'-0"



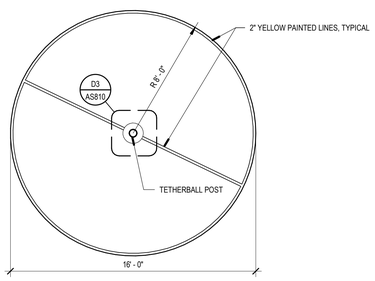
A1 SIDEWALK DETAIL @ ASPHALT

SCALE: 1 1/2" = 1'-0"



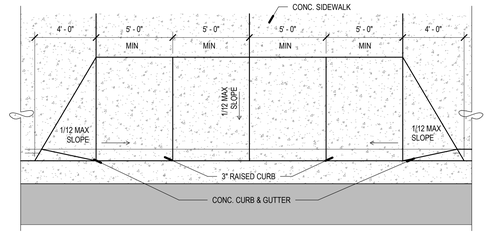
D3 TETHERBALL POLE DETAIL

SCALE: 1 1/2" = 1'-0"



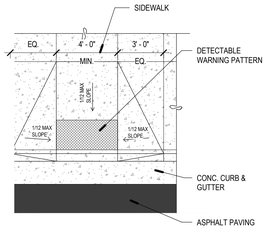
D4 TETHERBALL STRIPING DETAIL

SCALE: 1/4" = 1'-0"



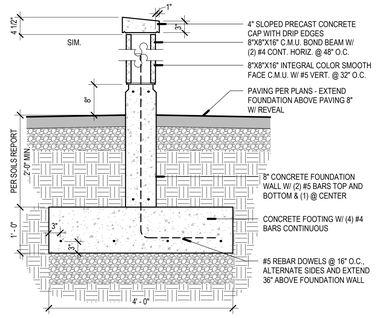
E5 FIRE LANE CURB CUT

SCALE: 1/4" = 1'-0"



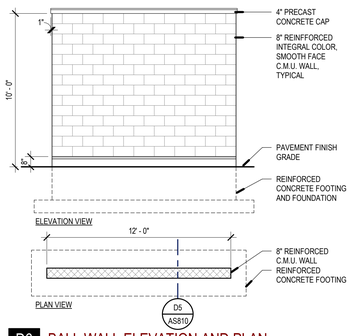
E6 HANDICAP CURB CUT

SCALE: 1/4" = 1'-0"



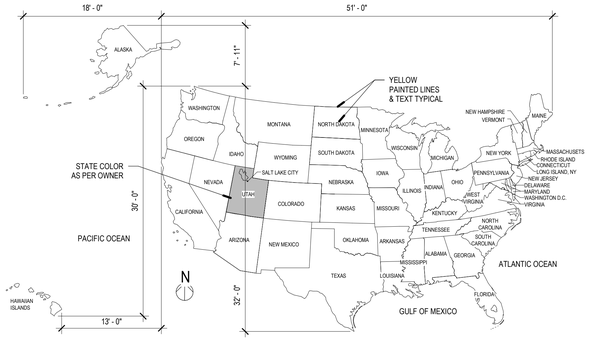
D5 BALL WALL FOOTING DETAIL

SCALE: 3/4" = 1'-0"



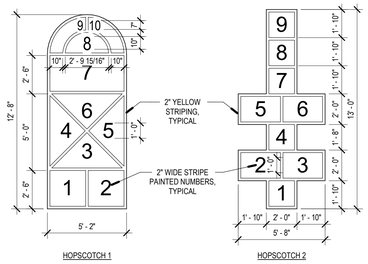
D6 BALL WALL ELEVATION AND PLAN

SCALE: 1/4" = 1'-0"



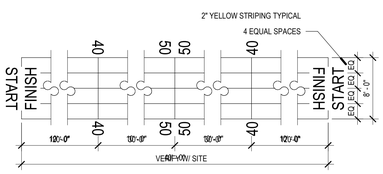
C4 U.S.A. MAP LAYOUT DETAIL

SCALE: 1/8" = 1'-0"



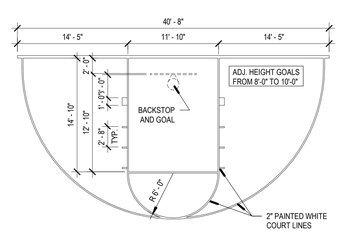
B4 HOPSCOTCH LAYOUT DETAIL

SCALE: 1/4" = 1'-0"



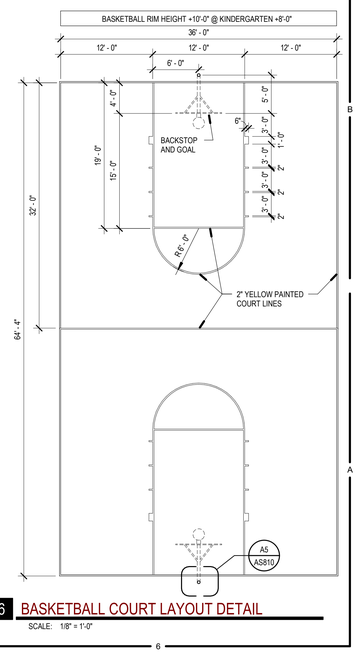
B3 100 YARD DASH LAYOUT DETAIL

SCALE: 1/8" = 1'-0"



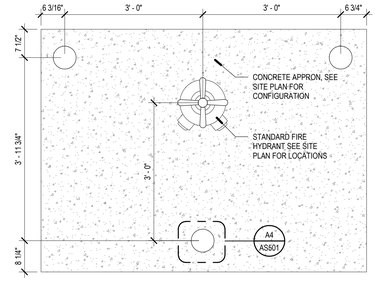
B5 BASKETBALL LINES

SCALE: 1/8" = 1'-0"



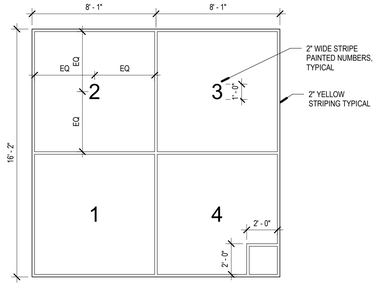
A6 BASKETBALL COURT LAYOUT DETAIL

SCALE: 1/8" = 1'-0"



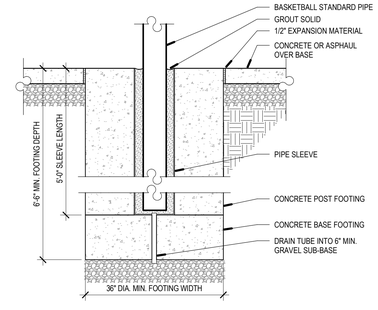
A3 FIRE HYDRANT WITH 3 BOLLARDS

SCALE: 3/4" = 1'-0"



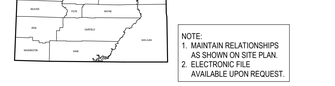
A4 FOUR SQUARE LAYOUT DETAIL

SCALE: 1/4" = 1'-0"



A5 OUTDOOR BASKETBALL PIPE DETAIL

SCALE: 3/4" = 1'-0"



C6 UTAH MAP DETAIL

SCALE: 1/8" = 1'-0"

VCBO®
SALT LAKE CITY, UT - HQ
ST. GEORGE, UT
LAIE, HI

524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.575.8800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

STATE OF UTAH
CHRISTOPHER S. GREEN
7067869
LICENSED ARCHITECT

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SITE DETAILS

AS810

11/8/2023 10:39:31 PM

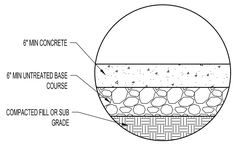
GENERAL NOTES

SPECIAL PROJECT NOTE:

- ALL CONSTRUCTION ACTIVITY WITHIN STREET ROW AND FOR SITE WATER LINES AND SEWER LINES SHALL CONFORM TO OGDEN CITY STANDARD PLANS AND "APWA MANUAL OF STANDARD PLANS" (LATEST EDITION) AND THE DEVELOPMENT GUIDELINES AND SPECIFICATIONS. CONTRACTOR SHALL OBTAIN COPIES OF SAID CITY STANDARDS AND APWA STANDARDS PRIOR TO CONSTRUCTION.

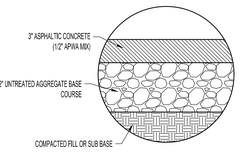
GENERAL

1. ANY MODIFICATION TO THIS CONSTRUCTION PACKAGE SHALL BE APPROVED BY THE OWNER, PRIOR TO SAID APPROVAL, ALL IMPROVEMENT DRAWINGS SHALL BE RESUBMITTED AND APPROVED BY THE CITY ENGINEER.
2. THE CONTRACTOR SHALL LOCATE, RETAIN AND PROTECT ALL EXISTING UTILITIES UNLESS OTHERWISE DIRECTED BY THE ENGINEER, EXISTING GAS, TELEPHONE, POWER, OR WATERLINES WHICH MUST BE RELOCATED OR LOWERED FOR NEW GRAVITY LINES WILL BE COMPLETED BY THE CONTRACTOR TO THE UTILITY COMPANY SPECIFICATIONS.
3. IF CITY SPECIFICATIONS AND THE GEOTECHNICAL REPORT ARE IN CONFLICT WITHIN THE CITY ROW REFER TO THE CITY ENGINEER FOR DIRECTION ON WHICH REQUIREMENTS MUST BE FOLLOWED IN THE FIELD.
4. TRACER TAPE SHALL BE PLACED ABOVE ALL SEWER, PVC ROOF DRAIN LINES. WATER AND SECONDARY WATER LINES PER CITY AND DISTRICT STANDARD SPECIFICATIONS. TRACER WIRE SHALL BE INSTALLED OVER THE WATER LINES.
5. ALL EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY, AS INDICATED ON THE C200 SHEET. CONTRACTOR SHALL NOTIFY BLUE STAKES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION. CONTRACTOR SHALL POTHOLE AND FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL UTILITY CONFLICTS UPON DISCOVERY.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BACKFILLING, COMPACTING, AND PAVEMENT RESTORATION WERE NECESSARY TO INSTALL NEW UTILITIES OR NEW IMPROVEMENTS PER CITY STANDARDS IN EXISTING ROADWAYS.
7. CONTRACTOR SHALL PROVIDE CITY INSPECTOR WITH CONSTRUCTION SCHEDULE AFTER SAID SCHEDULE HAS BEEN APPROVED BY OWNER.
8. CONTRACTOR SHALL COORDINATE CONSTRUCTION DEMOLITION AND INSTALLATION OF ELECTRICAL, AND COMMUNICATION SERVICES WITH THE UTILITY COMPANY. OWNER SHALL PAY ALL ASSOCIATED UTILITY COMPANY FEES. CONTRACTOR TO PROVIDE ELECTRICAL LINE OR COMMUNICATION TRENCHING AND BACKFILL. COORDINATE LOCATIONS WITH POWER AND COMMUNICATION COMPANY. ALL DEMOLITION OF EXISTING AND PROPOSED NEW SITE ELECTRICAL EQUIPMENT STRUCTURES AND LINES SHOWN ON CIVIL PLANS ARE SCHEMATICALLY SHOWN ONLY AS A COORDINATION BETWEEN ELECTRICAL AND CIVIL. PLEASE REFER DIRECTLY TO ELECTRICAL PLANS FOR THE LAYOUT AND DETAILS OF ALL SITE ELECTRICAL EQUIPMENT AND LINES.
9. CONTRACTOR TO KEEP A SET OF NEAT PLANS ON WHICH ALL CHANGES HAVE BEEN CLEARLY SHOWN. THIS SET OF REDLINES SHALL BE TURNED INTO THE ARCHITECT.
10. CONTRACTOR TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY PRIOR TO ANY WORK.
11. ALL UTILITY STRUCTURES WITHIN PAVEMENT SHALL BE RAISED TO ACCURATE FINISHED GRADE WITH A CONCRETE COLLAR. SEE DETAIL J ON THIS SHEET.
12. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS, BONDS, AND APPROVALS HAVE BEEN OBTAINED. ALL PERMIT AND BOND FEES ARE TO BE PAID BY THE OWNER.
13. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED, AND THOROUGHLY REVIEWED, ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
14. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE CURRENT REQUIREMENTS AND DEVELOPMENT STANDARDS OF THE CITY. THE SOILS REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND SHALL TAKE PRECEDENCE IN CASE OF CONFLICT UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY BETWEEN THE SOILS REPORT AND PLANS ETC.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR DUST AND EROSION CONTROL, CLEANING STREET AND OTHER SWPP REGULATIONS.
16. ALL EXISTING ASPHALT TO REMAIN SHALL BE SAW CUT IN NEAT, STRAIGHT LINES BY THE CONTRACTOR PRIOR TO EXCAVATION.
17. NO CHANGE IN DESIGN LOCATIONS OR GRADE WILL BE MADE BY THE CONTRACTOR WITHOUT THE WRITTEN APPROVAL OF THE OWNER AND ENGINEER.
18. CONTRACTOR SHALL NOT ALLOW ANY GROUND WATER, SURFACE WATER, ANIMALS, OR DEBRIS TO ENTER NEW PIPING DURING CONSTRUCTION.
19. CONTRACTOR SHALL TAKE NECESSARY MEASURES TO PROTECT ALL NEW FACILITIES DURING THE CONSTRUCTION PERIOD UNTIL THE DESIGN GRADE AND COVER HAVE BEEN REACHED AND WORK HAS BEEN ACCEPTED BY OWNER.
20. CONTRACTOR IS TO REMAIN WITHIN THE CONTRACT LIMITS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ADJACENT SURFACE IMPROVEMENTS DURING CONSTRUCTION.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF, OR DAMAGE TO, EXISTING AND NEW UTILITIES AND FACILITIES, INCLUDING WORK DONE WITHIN THE WARRANTY PERIOD.
22. ALL ONSITE PAVEMENT SECTIONS, GRADING, EXCAVATION, BACKFILLING, AND OTHER EARTHWORK OPERATIONS SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS PREPARED FOR THIS PROJECT. STRUCTURAL FILL, BEDDING, IMPORTED BACKFILL, GRANULAR SUBBASE, BASE COURSE AND ASPHALTIC CONCRETE MATERIALS SHALL MEET THE REQUIREMENTS OUTLINED IN THE PROJECT SPECIFICATIONS. ALL EARTHWORK AND PAVING IN CITY R.O.W. SHALL MEET CITY SPEC'S.
23. COORDINATE GAS INSTALLATION WITH THE GAS COMPANY. GAS COMPANY WILL ROUTE GAS TO THE METER LOCATION SHOWN ON THE PLANS. ACCOMMODATE GAS COMPANY CONTRACTOR ON SITE DURING GAS LINE INSTALLATION.
33. SEE SHEET C200 FOR SURVEY CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING THAT MAY BE NEEDED TO COMPLETE THE JOB.
34. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS AND TRAFFIC PERMITS AND TRAFFIC CONTROL PLANS FOR ALL WORK IN CITY R.O.W. (EXISTING AND NEW ROADWAYS) PRIOR TO BEGINNING WORK.
35. CONTRACTOR SHALL COORDINATE CONSTRUCTION AND INSTALLATION OF ELECTRICAL, TELEPHONE, NATURAL GAS, AND SERVICES WITH THE UTILITY COMPANY. ASSOCIATED UTILITY COMPANY FEES WILL BE PAID AS OUTLINED IN CONTRACT GENERAL CONDITIONS. CONTRACTOR TO PROVIDE ELECTRICAL AND TELEPHONE LINE TRENCHING AND BACKFILL. COORDINATE LOCATIONS WITH ROCKY MOUNTAIN POWER AND CENTURY LINK. COORDINATE AND SCHEDULE WITH DOMINION ENERGY, CENTURY LINK, AND ROCKY MOUNTAIN POWER FOR CONNECTION OF THESE UTILITIES TO THE NEW BUILDING. GAS, TELEPHONE AND POWER ALL MUST BE EXTENDED TO THE SITE FROM THE NEW DEVELOPMENT IN THE AREA. COORDINATE WITH THESE UTILITIES FOR LOCATION OF THESE NEW EXTENSIONS.
36. THE USE OF MOTOR OILS AND OTHER PETROLEUM-BASED OR TOXIC LIQUIDS, FOR DUST SUPPRESSION, IS ABSOLUTELY PROHIBITED.
37. NO DRIVEWAY SHALL BE CONSTRUCTED TO CONVEY STORM RUNOFF TOWARDS ANY BUILDING.
38. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, OR RESTORING ALL MONUMENTS AND MONUMENT REFERENCE MARKS WITHIN THE PROJECT SITE. CONTACT THE CITY OR COUNTY SURVEYOR FOR MONUMENT LOCATIONS AND CONSTRUCTION DETAILS.
39. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMING TO LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES AND FOR THE PROTECTION OF WORKERS.
40. CONTACT FOR UTILITY COORDINATION INCLUDE:
    - SEWER- OGDEN CITY PUBLIC WORKS 801-629-8271
    - WATER- OGDEN CITY PUBLIC WORKS 801-629-8271
    - STORM- OGDEN CITY PUBLIC WORKS 801-629-8271
    - IRRIGATION- PINEVIEW WATER 801-621-6555
    - GAS- DOMINION ENERGY 800-323-5517
    - POWER- PACIFICORP 801-220-7749
41. CONTRACTOR TO COORDINATE INSTALLATION OF ALL LANDSCAPE SLEEVES PRIOR TO FORMING CONCRETE SIDEWALKS, RETAINING WALLS, SEAT WALLS OR STAIR WALLS. SEE LANDSCAPE PLANS.
42. CONTRACTOR IS TO OBTAIN A SET OF THE PREVIOUS BID PACKAGES AND BE AWARE OF WHAT WAS DONE UNDER THAT CONTRACT.



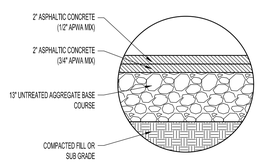
NOTE:
1. USE FOR DUMPSTER PADS AND OTHER CONCRETE PAVING WITH VEHICLE TRAFFIC, AS INDICATED BY HATCH ON CIVIL SITE LAYOUT PLAN. REINFORCING FOR DUMPSTER PADS REFER TO ARCHITECTURAL SPECS
2. PROOF ROLL NATURAL SUBGRADE PER SPEC'S.
3. PAVEMENT CONSTRUCTION DURING WET PERIODS WILL REQUIRE 12" OF GRANULAR FILL MATERIAL PLACED DIRECTLY BELOW THE GRANULAR FILL SUBBASE LAYER. INSTALL GEOTEXTILE FABRIC (MIRAFI 600X OR EQUIVALENT) WHERE SUBGRADE COMPACTION IS NOT FEASIBLE. PROVIDE ADDITIONAL FILL & FABRIC IF NECESSARY FOR COMPLETION SCHEDULE AT NO ADDITIONAL COST TO OWNER.
4. SEALED CONTRACTION JOINTS TO BE ¼" DEEP. JOINT PATTERN AS OUTLINED ON ARCHITECTURAL SITE PLANS. 15' MAXIMUM SPACING
5. SEAL ALL EXPANSION JOINTS PER SPEC'S.
6. IF EXISTING PAVEMENT IS PULVERIZED AND MIXED WITH NEW BASE COURSE MATERIAL, THE ASPHALT THICKNESS SHALL BE INCREASED 1/2" OVER THE RECYCLED ASPHALT BASE COURSE MIXTURE.
5. ALL COLD JOINTS ON SITE NEED TO BE DOWELED WITH PINKBAR FIBERGLASS REBAR.

CONCRETE PAVEMENT SECTION (ON SITE ONLY) — A
N.T.S.



NOTE:
1. USE FOR PARKING AREAS OR OTHER LIGHT VEHICLE TRAFFIC.
2. PROOF ROLL NATURAL SUBGRADE PER SPEC'S.
3. PAVEMENT CONSTRUCTION DURING WET PERIODS WILL REQUIRE 12" OF GRANULAR FILL MATERIAL PLACED DIRECTLY BELOW THE GRANULAR FILL SUBBASE LAYER. INSTALL GEOTEXTILE FABRIC (MIRAFI 600X OR EQUIVALENT) WHERE SUBGRADE COMPACTION IS NOT FEASIBLE. PROVIDE ADDITIONAL FILL & FABRIC IF NECESSARY FOR COMPLETION SCHEDULE AT NO ADDITIONAL COST TO OWNER.
4. ASPHALT MIX TO COMPLY WITH APWA SPECIFICATIONS.
5. STREET REPAIR IN CITY RIGHT OF WAY TO MEET CITY STANDARD ON -.
6. IF EXISTING PAVEMENT IS PULVERIZED AND MIXED WITH NEW BASE COURSE MATERIAL, THE ASPHALT THICKNESS SHALL BE INCREASED 1/2" OVER THE RECYCLED ASPHALT BASE COURSE MIXTURE. FINISH GRADES SHALL REMAIN THE SAME AS THE GRADING PLAN INDICATES.

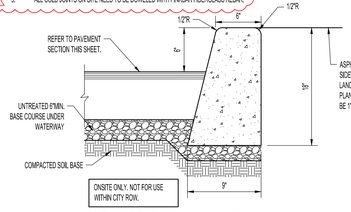
ASPHALT PAVEMENT SECTION (ON SITE ONLY) — B
N.T.S.



NOTE:
1. USE FOR SITE ROADWAYS AND BUS AREAS, AND OTHER HEAVY TRAFFIC AREAS. AS INDICATED BY HATCH ON CIVIL SITE LAYOUT PLAN.
2. PROOF ROLL NATURAL SUBGRADE PER SPEC'S.
3. PAVEMENT CONSTRUCTION DURING WET PERIODS WILL REQUIRE 12" OF GRANULAR FILL MATERIAL PLACED DIRECTLY BELOW THE GRANULAR FILL SUBBASE LAYER. INSTALL GEOTEXTILE FABRIC (MIRAFI 600X OR EQUIVALENT) WHERE SUBGRADE COMPACTION IS NOT FEASIBLE. PROVIDE ADDITIONAL FILL & FABRIC IF NECESSARY FOR COMPLETION SCHEDULE AT NO ADDITIONAL COST TO OWNER.
4. ASPHALT MIX TO COMPLY WITH APWA SPECIFICATIONS.
5. STREET REPAIR IN CITY RIGHT OF WAY TO MEET CITY STANDARD ON -.
6. IF EXISTING PAVEMENT IS PULVERIZED AND MIXED WITH NEW BASE COURSE MATERIAL, THE ASPHALT THICKNESS SHALL BE INCREASED 1/2" OVER THE RECYCLED ASPHALT BASE COURSE MIXTURE. FINISH GRADES SHALL REMAIN THE SAME AS THE GRADING PLAN INDICATES.

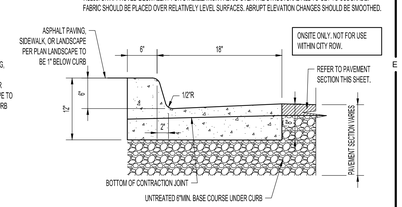
HEAVY DUTY (ON SITE ONLY) ASPHALT PAVEMENT SECTION — C
N.T.S.

NOTES:
1. CONCRETE SHALL BE MONOLITHIC 4000 PSI @ 28 DAYS (6% AIR ENTRAINED).
2. PLACE EXPANSION/CONTRACTION JOINTS AT ALL BC AND EC POINTS. PLACE CONTROL JOINTS AT 10' INTERVALS.
3. PLACE JOINT FILLER STRIPS BETWEEN WALK AND CURB TO DEPTH OF CONCRETE PLUS ONE INCH WITH TIP SET FLUSH WITH TOP BACK OF CURB.
4. REMOVE NON-ENGINEERED FILL BELOW CURB AND 2' MINIMUM BEYOND THE EDGE OF CONCRETE AND REPLACE STRUCTURAL FILL. REFER TO SPEC. SECTION 312000 FOR SUBGRADES PREPARATION OVEREXCAVATION REQUIREMENTS.
5. WHEN PAVEMENT IS PLACED ON 5 FEET OR MORE OF SITE FILL. THE GENERAL SITE FILL SHOULD MEET THE REQUIREMENTS OUTLINED IN THE EARTH MOVING SPEC, THE TOP 24" OF FILL MUST BE STRUCTURAL FILL WITH MIRAFI RS280i OR APPROVED EQUIVALENT FOR STABILIZATION FABRIC OVER THE STRUCTURAL FILL TO GET TO SUBGRADE. FABRIC SHOULD BE PLACED OVER RELATIVELY LEVEL SURFACES. ABRUPT ELEVATION CHANGES SHOULD BE SMOOTHED.
5. ALL COLD JOINTS ON SITE NEED TO BE DOWELED WITH PINKBAR FIBERGLASS REBAR.

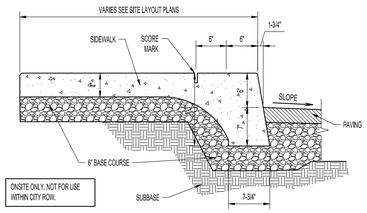


CURB DETAIL — D
N.T.S.

NOTES:
1. CONCRETE SHALL BE MONOLITHIC 4000 PSI @ 28 DAYS (6% AIR ENTRAINED).
2. PLACE EXPANSION/CONTRACTION JOINTS AT ALL BC AND EC POINTS. PLACE CONTROL JOINTS AT 10' INTERVALS.
3. PLACE JOINT FILLER STRIPS BETWEEN WALK AND CURB TO DEPTH OF CONCRETE PLUS ONE INCH WITH TIP SET FLUSH WITH TOP BACK OF CURB.
4. REMOVE NON-ENGINEERED FILL BELOW CURB AND 2' MINIMUM BEYOND THE EDGE OF CONCRETE AND REPLACE STRUCTURAL FILL. REFER TO SPEC. SECTION 312000 FOR SUBGRADES PREPARATION OVEREXCAVATION REQUIREMENTS.
5. ALL COLD JOINTS ON SITE NEED TO BE DOWELED WITH PINKBAR FIBERGLASS REBAR.
6. WHEN PAVEMENT IS PLACED ON 5 FEET OR MORE OF SITE FILL. THE GENERAL SITE FILL SHOULD MEET THE REQUIREMENTS OUTLINED IN THE EARTH MOVING SPEC, THE TOP 24" OF FILL MUST BE STRUCTURAL FILL WITH MIRAFI RS280i OR APPROVED EQUIVALENT FOR STABILIZATION FABRIC OVER THE STRUCTURAL FILL TO GET TO SUBGRADE. FABRIC SHOULD BE PLACED OVER RELATIVELY LEVEL SURFACES. ABRUPT ELEVATION CHANGES SHOULD BE SMOOTHED.



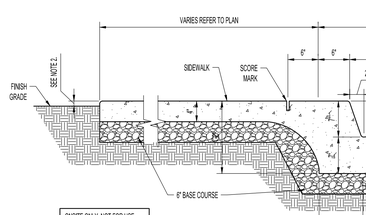
CURB & GUTTER — E
N.T.S.



FOR USE ON AREAS WHERE WATER DRAINS AWAY FROM CURB

NOTES
1. USE MONOLITHIC CONSTRUCTION 4" THICK EXCEPT AT DRIVEWAYS WHERE THICKNESS OF 6" IS REQUIRED.
2. PLACE SCORE LINES AT INTERVALS EQUAL TO 1 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK.
3. USE 1/2" EXPANSION JOINT FILLER MADE OF PREMOLDED BITUMINOUS OR SIMILAR MATERIAL AT INTERSECTIONS WITH PERPENDICULAR SIDEWALKS.
4. EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
5. USE HAIR-BROOM BRUSH TO FINISH SIDEWALKS.
6. OVER NEWLY BACKFILLED TRENCHES. PLACEMENT OF 2-#3 OR 2-#4 BARS IN SIDEWALK IS REQUIRED.
7. REMOVE NON-ENGINEERED FILL BELOW SIDEWALK AND 2' MINIMUM BEYOND THE EDGE OF CONCRETE AND REPLACE WITH STRUCTURAL FILL.
8. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
5. ALL COLD JOINTS ON SITE NEED TO BE DOWELED WITH PINKBAR FIBERGLASS REBAR.

MONOLITHIC SIDEWALK AND CURB DETAIL — F
N.T.S.



NOTES
1. USE MONOLITHIC CONSTRUCTION 4" THICK EXCEPT AT DRIVEWAYS WHERE THICKNESS OF 6" IS REQUIRED.
2. PLACE SCORE LINES AT INTERVALS EQUAL TO 1 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK.
3. USE 1/2" EXPANSION JOINT FILLER MADE OF PREMOLDED BITUMINOUS OR SIMILAR MATERIAL AT INTERSECTIONS WITH PERPENDICULAR SIDEWALKS.
4. EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
5. USE HAIR-BROOM BRUSH TO FINISH SIDEWALKS.
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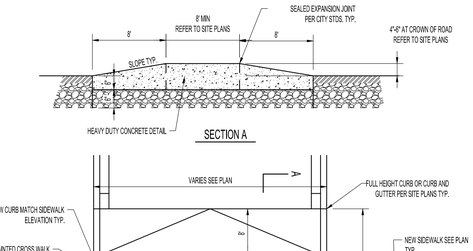
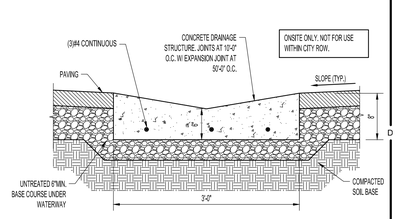
7. REMOVE NON-ENGINEERED FILL BELOW SIDEWALK AND 2' MINIMUM BEYOND THE EDGE OF CONCRETE AND REPLACE WITH STRUCTURAL FILL.
8. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
5. ALL COLD JOINTS ON SITE NEED TO BE DOWELED WITH PINKBAR FIBERGLASS REBAR.

MONOLITHIC SIDEWALK AND CURB AND GUTTER — G
N.T.S.



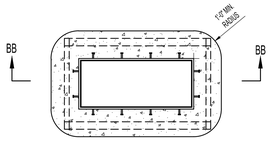
RAISED CROSSWALK — H
N.T.S.

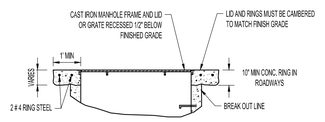


SIMILAR TO APWA PLAN #221

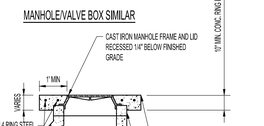
NOTES:
1. CONCRETE SHALL BE MONOLITHIC 4000 PSI @ 28 DAYS (6% AIR ENTRAINED).
2. PLACE EXPANSION/CONTRACTION JOINTS AT ALL BC AND EC POINTS. PLACE CONTROL JOINTS AT 10' INTERVALS.
3. PLACE JOINT FILLER STRIPS BETWEEN WALK AND CURB TO DEPTH OF CONCRETE PLUS ONE INCH WITH TIP SET FLUSH WITH TOP BACK OF CURB.
4. REMOVE NON-ENGINEERED FILL BELOW CURB AND 2' MINIMUM BEYOND THE EDGE OF CONCRETE AND REPLACE STRUCTURAL FILL. REFER TO SPEC. SECTION 312000 FOR SUBGRADES PREPARATION OVEREXCAVATION REQUIREMENTS.
5. ALL COLD JOINTS ON SITE NEED TO BE DOWELED WITH PINKBAR FIBERGLASS REBAR.
6. WHEN PAVEMENT IS PLACED ON 5 FEET OR MORE OF SITE FILL. THE GENERAL SITE FILL SHOULD MEET THE REQUIREMENTS OUTLINED IN THE EARTH MOVING SPEC, THE TOP 24" OF FILL MUST BE STRUCTURAL FILL WITH MIRAFI RS280i OR APPROVED EQUIVALENT FOR STABILIZATION FABRIC OVER THE STRUCTURAL FILL TO GET TO SUBGRADE. FABRIC SHOULD BE PLACED OVER RELATIVELY LEVEL SURFACES. ABRUPT ELEVATION CHANGES SHOULD BE SMOOTHED.

3' WATERWAY — I
N.T.S.





CATCH BASIN/JUNCTION BOX
SECTION BB

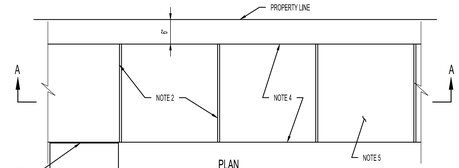


MANHOLE/VALVE BOX SIMILAR

SECTION AA

NOTES:
1. REQUIRED FOR EXISTING OR NEW CATCH BASINS (OUTSIDE OF C&G), CLEAN OUTS, VALVES OR MANHOLES AND ALL OTHER UTILITY STRUCTURES IN THE PROJECT LIMITS.
2. WHERE CONCRETE PAVING IS COMPLETED AROUND UTILITY STRUCTURE, USE REINFORCEMENT SHOWN AROUND THE UTILITY STRUCTURE.
3. CONCRETE COLLARS ARE REQUIRED ON ALL STRUCTURES INCLUDING IN LANDSCAPE AREAS.

CONCRETE RING AROUND SURFACE UTILITY STRUCTURES — J
N.T.S.

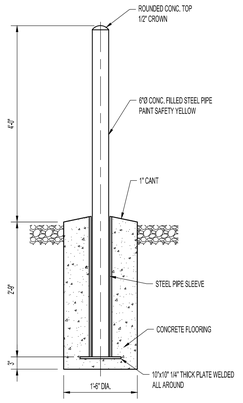


SECTION A

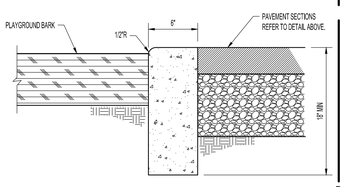
NOTES
1. USE MONOLITHIC CONSTRUCTION 4" THICK EXCEPT AT DRIVEWAYS WHERE THICKNESS OF 6" IS REQUIRED.
2. SAWCUT AND CHAMFER SCORE LINES AT INTERVALS EQUAL TO 1 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK AFTER POUR. SAW CUTTING SHOULD BE DONE 4 TO 12 HOURS AFTER THE CONCRETE HAS BEEN FINISHED. IN HOT WEATHER EARLY-ENTRY DRY-CUT JOINTS SHOULD BE CUT 1 TO 4 HOURS AFTER FINISHING.
3. SIDEWALK EXPANSION JOINTS SHALL BE 20' ON CENTER MAXIMUM. THE EXPANSION JOINT SHALL INCLUDE ASPHALT IMPREGNATED FIBER EXPANSION MATERIAL. THE CONTRACTOR WILL USE BOND BREAKER TAPE WITH POLYURETHANE JOINT SEALANT TO A DEPTH OF 3/8".
4. EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
5. USE HAIR-BROOM BRUSH TO FINISH SIDEWALKS.
6. OVER NEWLY BACKFILLED TRENCHES. PLACEMENT OF 2-#3 OR #4 BARS IN SIDEWALK IS REQUIRED.
7. REMOVE NON-ENGINEERFILL BELOW SIDEWALK AND 2' MINIMUM BEYOND THE EDGE OF CONCRETE AND REPLACE WITH STRUCTURAL FILL.
8. ALL CONCRETE SIDEWALK SLABS SHALL BE DOWELED TO ADJACENT SLABS WITH REBAR DOWELS AT EXPANSION JOINTS OR ANY BREAK IN THE POUR. DOWELS ARE TO BE EVENLY SPACED WITH MAXIMUM DISTANCE BETWEEN DOWELS NOT TO EXCEED 24". REBAR DOWELS MUST BE #4 OR LARGER AT LEAST 24" LONG. DOWELS MUST BE EMBEDDED AT LEAST 3" DEEP AND NO CLOSER THAN 3" FROM THE EDGE OF THE SLAB.
5. ALL COLD JOINTS ON SITE NEED TO BE DOWELED WITH PINKBAR FIBERGLASS REBAR.

ONSITE ONLY. NOT FOR USE WITHIN CITY ROW.

CONCRETE SIDEWALK — K
N.T.S.



BOLLARD DETAIL — L
N.T.S.



FLUSH CURB WALL — M
N.T.S.

SYMBOL LEGEND

- YH YARD HYDRANT
- FIRE HYDRANT
- WV WATER VALVE
- WATER METER
- PIV POST INDICATOR VALVE
- FDC FIRE DEPARTMENT CONNECTION
- WATER CAP
- WATER TEE
- WATER CROSS
- WATER WYE
- WATER REDUCER
- WATER BENDS
- AREA DRAIN (SIZE PER PLAN)
- CATCH BASIN (SIZE PER PLAN)
- PRE-TREATMENT CURB INLET BOX (PRE-TREAT CB)
- CURB INLET BOX (CIB)
- COMBO BOX (COMBO)
- STORM DRAIN FLARED END SECTION
- STORM DRAIN / SANITARY SEWER CLEANOUT
- 48" STORM DRAIN /SANITARY SEWER MANHOLE
- HYDRODYNAMIC SEPARATOR
- ELECTRIC METER
- GAS METER
- LIGHT POLE
- DOUBLE LIGHT POLE
- CURB & GUTTER (24")
- CURB WALL (8")
- 33.05 TBC SPOT ELEVATION
- HANDICAPPED PARKING
- STOP BAR
- PAVEMENT MARKING
- PP POWER POLE
- SIGN
- CLEANOUT BOX
- THREE CHAMBER PRE-TREATMENT BOX
- GREASE TRAP
- CITY STREET LIGHT (REFER TO ELECTRICAL PLANS)

LINE LEGEND

- PROPERTY LINE
- LIMITS OF PROJECT
- MATCHLINE
- CENTERLINE
- SAW CUT LINE
- 4455 PROPOSED MAJOR CONTOUR
- 4454 PROPOSED MINOR CONTOUR
- SS SANITARY SEWER PIPELINE
- SD STORM DRAIN PIPELINE
- LD LAND DRAIN
- T TELEPHONE
- W WATER PIPELINE
- IRR SECONDARY WATER PIPELINE
- G GAS PIPELINE
- P BURIED POWER
- CATV CATV
- FO FIBER OPTIC
- RIDGE RIDGE LINE
- FLOW LINE
- X FENCE
- SF SILT FENCE
- TEMPORARY SHORING
- XX REMOVAL
- ABANDON

VCBO ARCHITECTURE
SALT LAKE CITY, UT - HQ
ST. GEORGE, UT
LAIE, HI
524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.576.8800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH — JUSTIN W. JUDD — 11/08/23 — NICHOLE LEE LUTH — #8023335

REV	DATE	DESCRIPTION
1	12/07/2023	ASI#03

OSD HILLCREST ELEMENTARY REBUILD

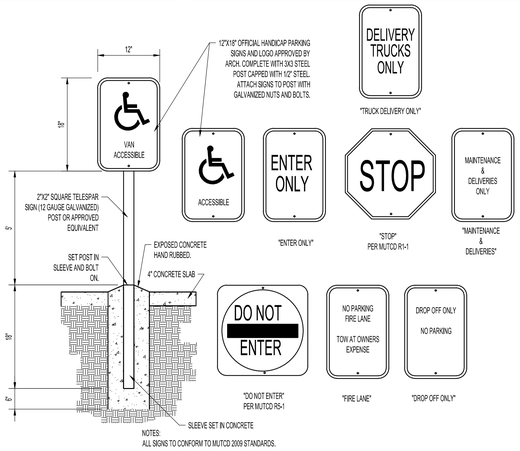
130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

GENERAL NOTES AND DETAILS

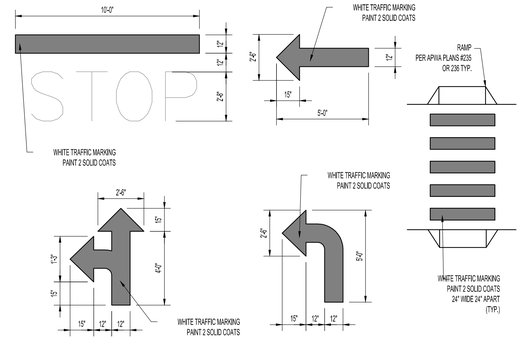
C100

MERIDIAN ENGINEERING 25 YEAR

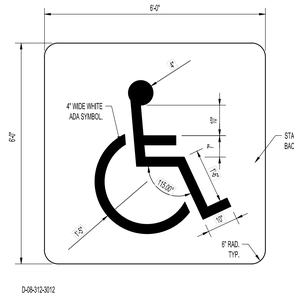


NOTES:
ALL SIGNS TO CONFORM TO MUTCD 2009 STANDARDS.

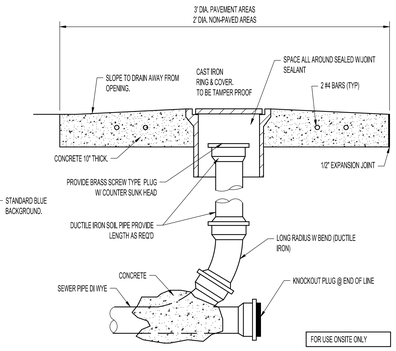
SIGN DETAIL 1 — A
N.T.S.



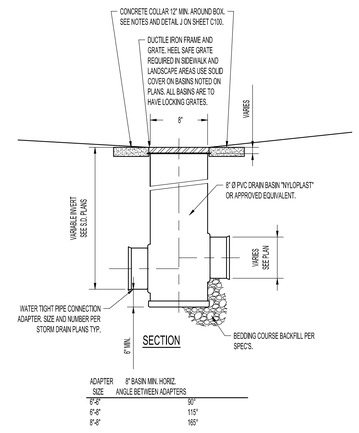
PAINTED TRAFFIC MARKINGS — B
N.T.S.



PAINTED ADA SYMBOL — C
N.T.S.

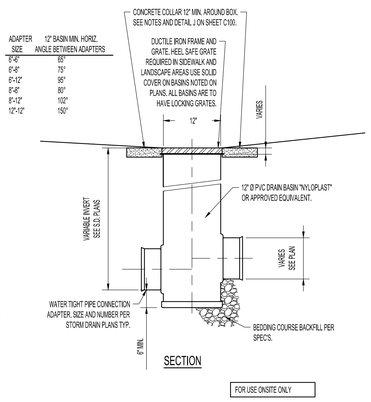


EXTERIOR CLEAN OUT (SSCO AND SDCO) — D
N.T.S.



ADAPTER SIZE	8" BASIN MIN. HORIZ. ANGLE BETWEEN ADAPTERS
6"-6"	90°
6"-8"	115°
8"-8"	165°

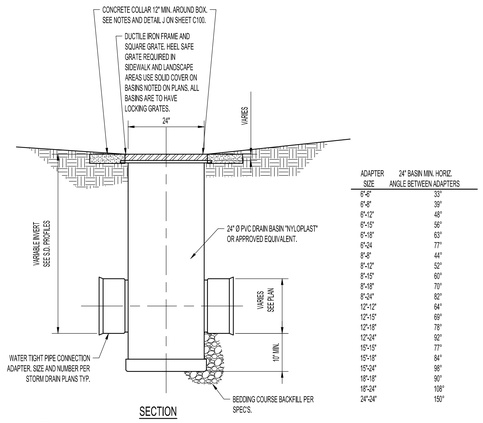
8" AREA DRAIN (ADS) — E
N.T.S.



ADAPTER SIZE	12" BASIN MIN. HORIZ. ANGLE BETWEEN ADAPTERS
6"-6"	85°
6"-8"	75°
6"-12"	95°
8"-8"	80°
8"-12"	102°
12"-12"	150°

FOR USE ONSITE ONLY

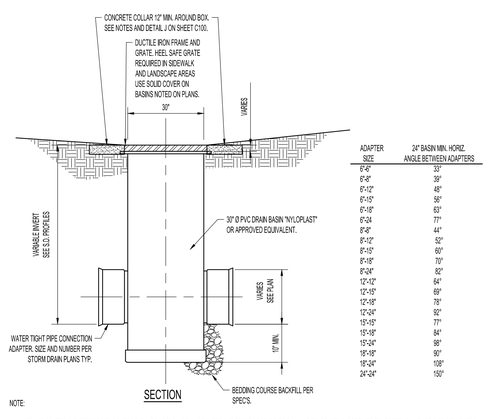
12" AREA DRAIN (AD) — F
N.T.S.



ADAPTER SIZE	24" BASIN MIN. HORIZ. ANGLE BETWEEN ADAPTERS
6"-6"	33°
6"-8"	39°
6"-12"	48°
6"-15"	56°
6"-18"	63°
6"-24	77°
8"-8"	44°
8"-12"	52°
8"-15"	60°
8"-18"	70°
8"-24"	82°
12"-12"	64°
12"-15"	69°
12"-18"	78°
12"-24"	92°
15"-15"	77°
15"-18"	84°
15"-24"	98°
18"-18"	90°
18"-24"	108°
24"-24"	150°

NOTE:
1. USE H-10 SQUARE GRATE ONLY AND FRAMES. DEPTH OF GRATE PER MANUFACTURERS STANDARDS.
2. CONSTRUCT BASINS PER MANUFACTURES REQUIREMENTS.

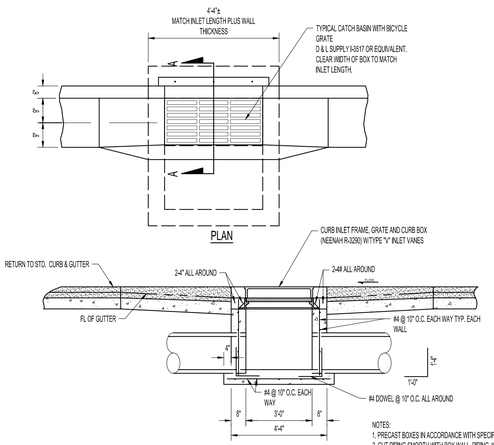
24" CATCH BASIN (CB) — G
N.T.S.



ADAPTER SIZE	30" BASIN MIN. HORIZ. ANGLE BETWEEN ADAPTERS
6"-6"	33°
6"-8"	39°
6"-12"	48°
6"-15"	56°
6"-18"	63°
6"-24	77°
8"-8"	44°
8"-12"	52°
8"-15"	60°
8"-18"	70°
8"-24"	82°
12"-12"	64°
12"-15"	69°
12"-18"	78°
12"-24"	92°
15"-15"	77°
15"-18"	84°
15"-24"	98°
18"-18"	90°
18"-24"	108°
24"-24"	150°

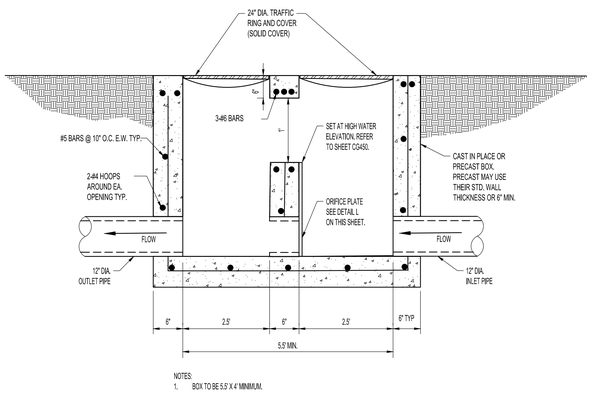
NOTE:
1. USE H-20 GRATES AND FRAMES FOR COVERS IN PAVED AREAS. USE H-10 GRATES AND FRAMES FOR COVERS IN LANDSCAPE AREAS. DEPTH OF GRATE PER MANUFACTURERS STANDARDS.
2. CONSTRUCT BASINS PER MANUFACTURES REQUIREMENTS.
3. USE LOCKING GRATES ON ALL CATCH BASINS USED IN DETENTION BASIN AREAS.
4. CONCRETE COLLARS ARE REQUIRED IN DETENTION BASINS.

30" CATCH BASIN (CB) — H
N.T.S.



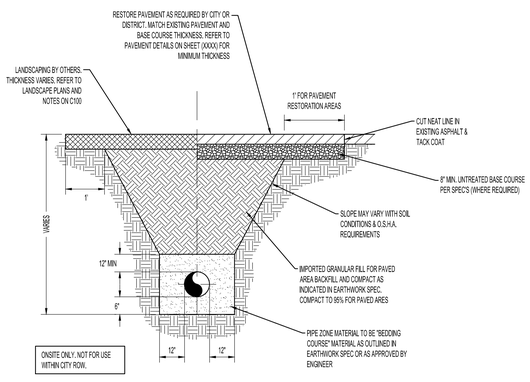
NOTES:
1. PRECAST BOXES IN ACCORDANCE WITH SPECIFICATIONS ARE ACCEPTABLE.
2. CUT PIPING SMOOTH WITH BOX WALL. PIPING JOINT WITH BOX WALL AND ALL LEDGES SHALL BE GROUTED SMOOTH WITH EPOXY GROUT.

CURB & GUTTER INLET BOX (CIB) — I
N.T.S.

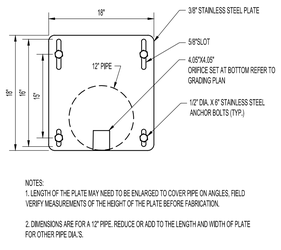


NOTES:
1. BOX TO BE 5.5' X 4' MINIMUM.

OVERFLOW BOX — J
N.T.S.



TYPICAL TRENCH AND SURFACE REPAIR — K
N.T.S.



NOTES:
1. LENGTH OF THE PLATE MAY NEED TO BE ENLARGED TO COVER PIPE ON ANGLES. FIELD VERIFY MEASUREMENTS OF THE HEIGHT OF THE PLATE BEFORE FABRICATION.

2. DIMENSIONS ARE FOR A 12" PIPE. REDUCE OR ADD TO THE LENGTH AND WIDTH OF PLATE FOR OTHER PIPE DIA.'S.

ORIFICE PLATE DETAIL — L
N.T.S.

VCBO ARCHITECTURE
SALT LAKE CITY, UT - HQ
ST. GEORGE, UT
LAIE, HI
524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.576.8800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH
11/08/23
NICHOLE LEE LITH
8023335

REV	DATE	DESCRIPTION

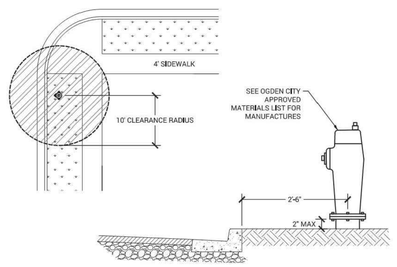
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

UTILITY DETAILS

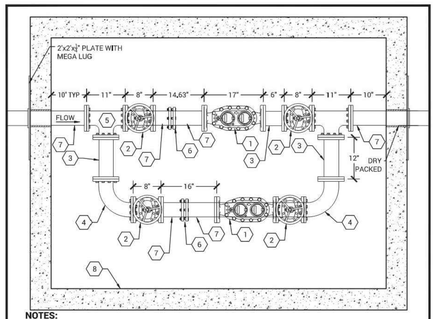
C101



NOTES:

1. PAINT TOP AND FACE OF CURB, 15' ON BOTH SIDES, WITH RED PAINT TO INDICATE NO PARKING.
2. NO TREES, PLANTS, FLOWERS, SHRUBS, OR ANY OTHER ITEM WHICH MAY OBSTRUCT THE VIEW OR ACCESS TO A FIRE HYDRANT, SHALL BE INSTALLED/PLANTED WITHIN 10' OF ANY FIRE HYDRANT.
3. HYDRANT SHALL BE 2'-6" BEHIND THE BACK OF CURB OR AS SPECIFIED BY THE CITY ENGINEER.
4. ARTERIAL ROADS SHALL HAVE FIRE HYDRANTS ON BOTH SIDES OF THE ROADWAY.
5. INSTALL A 4'x4' 6" THICK CONCRETE PAD AROUND THE BASE IF NO CURB AND GUTTER IS PRESENT.
   5.1. BOLLARD INSTALLATION MAY BE REQUIRED BASED ON THE HYDRANT LOCATION.
6. FIRE HYDRANT SPACING:
   6.1. SHALL NOT EXCEED A 500' RADIUS IN AREAS WITH SINGLE FAMILY DWELLINGS.
   6.2. SHALL NOT EXCEED A 300' RADIUS IN ALL OTHER AREAS.
   6.3. OR AS DETERMINED BY THE FIRE MARSHAL.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed	FIRE HYDRANT LOCATION	W-2
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 1 2020

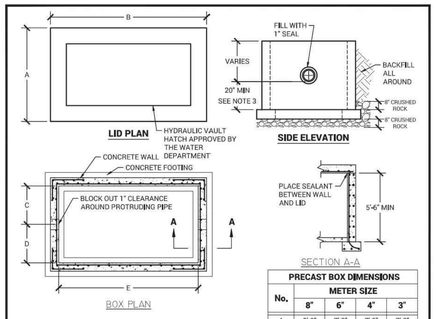


NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL ALL MATERIALS AS SHOWN ON THE DETAIL, UNLESS DIRECTED OTHERWISE BY OGDEN CITY WATER.
2. PROVIDE AND PLACE BACKFILL PER APWA SECTION 33 05 20, COMPACT PER APWA SECTION 31 23 26 TO A DENSITY OF 95 PERCENT OR GREATER, MAXIMUM LIFT THICKNESS IS 8" WHEN USING RIDING COMPACTION AND 6" WHEN USING HAND HELD COMPACTION EQUIPMENT.
3. SEE STANDARD DRAWING W-9 FOR ADDITIONAL VAULT DETAILS. ALLOW 1" CLEARANCE AROUND THE LINE THROUGH THE VAULT WALL. DRY PACK REMAINING SPACE AROUND THE PIPE. SUPPORT WATER METER ON LATERAL AND BYPASS WITH JACK STANDS, ANY REQUIRED REDUCERS (4"x 3") ARE TO BE INSTALLED OUTSIDE OF THE VAULT.
4. ALL FITTINGS TO BE FLANGED, AND ALL JOINTS MUST BE RESTRAINED.

ITEM	QTY	DESCRIPTION
1	2	3" WATER METER (CITY PROVIDED - FEE REQUIRED)
2	4	3" GATE VALVE (FLxFL) WITH HANDWHEEL
3	3	3" DUCTILE IRON SPOOL (FLxFL)
4	2	3" LONG RADIUS 90° BEND (FLxFL)
5	2	3"x3"x3" TEE (FLxFLxFL)
6	2	3" DRESSER
7	6	3" DUCTILE IRON PIPE (FLxCUT TO FIT)
8	1	6'x8' (INTERIOR) PRECAST CONCRETE VAULT (SEE STD DWG W-9)

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed	3" COMPOUND WATER METER WITH 3" BYPASS	W-5
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 1 2020



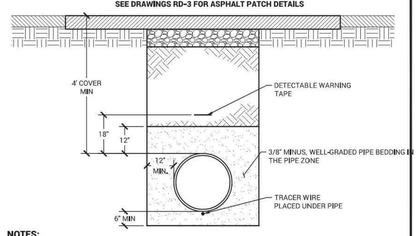
PRECAST BOX DIMENSIONS				
No.	METER SIZE			
	8"	6"	4"	3"
A	9'-0"	7'-0"	7'-0"	7'-0"
B	15'-0"	13'-0"	11'-0"	9'-0"
C	3'-4"	1'-8"	1'-11"	1'-11"
D	4'-8"	4'-4"	4-1"	4-1"
E	14'-0"	12'-0"	10'-0"	8'-0"

NOTES:

1. ALL VAULTS TO BE TRAFFIC RATED, DESIGNED, AND APPROVED BY A LICENSED STRUCTURAL ENGINEER.
   1.1. PROVIDE CLASS 4000 CONCRETE, APWA 03 30 04, VAULT SHALL BE APPROVED BY OGDEN CITY ENGINEERING PRIOR TO INSTALLATION, VAULT LAYOUT FOR AN 8" WATER METER WITH BYPASS MUST BE APPROVED BY OGDEN CITY ENGINEERING.
2. BACKFILL: PROVIDE AND PLACE PER APWA SECTION 31 23 23, COMPACT PER APWA SECTION 31 23 26 TO A DENSITY OF 95 PERCENT OR GREATER, MAXIMUM LIFT THICKNESS IS 8" BEFORE COMPACTION.
3. 8" MINIMUM OF CRUSHED ROCK TO BE PLACED ABOVE TOP OF FOOTING, 12" MINIMUM CLEAR SPACE FROM BOTTOM OF PIPE TO CRUSHED ROCK.
4. FILL ANNULAR SPACE AROUND PIPE WALL PENETRATIONS WITH WATERPROOF SEAL.
5. PRE-CAST VAULTS ARE ALLOWED. DRAWINGS MUST BE APPROVED BY THE CITY.
6. PRE-PLUMBED VAULTS ARE ALLOWED, DRAWINGS MUST BE APPROVED BY THE CITY.
7. CENTER THE VAULT HATCH LID OVER THE METER.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed	CONCRETE METER VAULTS	W-9
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 1 2020

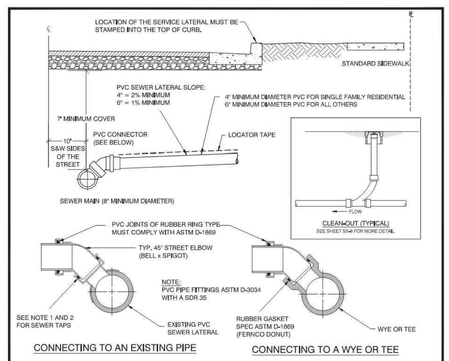
SEE DRAWINGS RD-3 FOR ASPHALT PATCH DETAILS



NOTES:

1. PIPE ZONE WIDTH IS RECOMMENDED BY THE MANUFACTURE OF THE PIPE, WIDTH OF THE PIPE ZONE IS MEASURED AT THE PIPE SPRING LINE AND INCLUDES ANY NECESSARY SHEATHING. FOLLOW MANUFACTURER RECOMMENDATIONS FOR ANY TRENCH BOX APPLICATIONS.
2. INSTALL THE PIPE IN THE CENTER OF THE TRENCH.
3. BASE COURSE PER APWA SECTION 32 11 23.
4. WIDTH OF EXCAVATION IS MEASURED AT THE PIPE SPRING LINE AND INCLUDES ANY NECESSARY SHEATHING.
5. USE 3/8" MINUS WELL-GRADED PIPE BEDDING IMPORT FILL IN THE PIPE ZONE, MAXIMUM LIFT THICKNESS IS 8" BEFORE COMPACTION.
6. DO NOT USE RECYCLED RAP AGGREGATE IN THE TRENCH. IF MANUFACTURER RECOMMENDS ANYTHING CONTRARY TO WHAT IS LISTED BELOW, CONSULT WITH THE ENGINEERING DEPARTMENT.
   6.1. HAUNCHING/BEDDING: INSTALL AND COMPACT PER MANUFACTURER RECOMMENDATIONS AND ASTM SPECIFICATIONS.
      6.1.1. WATER JETTING IS NOT ALLOWED.
      6.1.2. SUBMISSION OF COMPACTION TEST DATA FOR THE HAUNCHING AREAS MAY BE REQUESTED AT ANY TIME.
   6.2. BACKFILL: INSTALL AND COMPACT PER MANUFACTURER RECOMMENDATIONS AND ASTM SPECIFICATIONS, DO NOT PLACE IN LIFTS GREATER THAN 8" BEFORE COMPACTION.
      6.2.1. COMPACT PER APWA SECTION 31 23 26 TO A DENSITY OF 95 PERCENT OR GREATER, MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8" WHEN USING RIDING AND 6" WHEN USING HAND COMPACTION EQUIPMENT.
7. PEA GRAVEL IS NOT ALLOWED IN ANY PART OF THE TRENCH.
8. REFER TO APWA SECTION 33 05 07 FOR ADDITIONAL INFORMATION ON PVC PIPE.
9. ALL TRACER WIRE SHALL BE TESTED FOR CONTINUITY IN THE PRESENCE OF A REPRESENTATIVE FROM OGDEN CITY WATER PRIOR TO ASPHALT PLACEMENT. ANY TRACER WIRE FOUND NOT TO BE CONTINUOUS AFTER TESTING SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE PRIOR TO ASPHALT PLACEMENT.
10. ALL TRACER WIRE WILL BE RE-TESTED AT THE 1-YEAR WARRANTY INSPECTION. ANY TRACER WIRE FOUND NOT TO BE CONTINUOUS AFTER TESTING SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed	TYPICAL WATERLINE TRENCH	W-18
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 1 2020



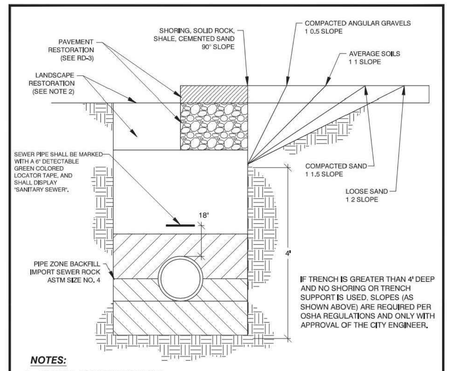
CONNECTING TO AN EXISTING PIPE

CONNECTING TO A WYE OR TEE

NOTES:

1. CONNECTION FEES WILL BE ASSESSED AT THE TIME A PERMIT IS ISSUED. SEWER TAPS WILL BE PERFORMED BY OGDEN CITY PERSONNEL. WYE CONNECTIONS WILL BE PERFORMED BY THE CONTRACTOR UNDER THE SUPERVISION OF AN OGDEN CITY INSPECTOR.
2. SEWER TAPS INTO EXISTING 8" DIAMETER SANITARY SEWER PIPES SHALL NOT BE GREATER THAN 4".
3. ALLOWABLE SANITARY SEWER LATERAL PIPE MATERIAL:
   3.1. PVC SDR-35, GREEN IN COLOR
   3.2. HDPE DR-17
4. REQUIREMENTS FOR THE BEDDING OF A LATERAL IS THE SAME AS SHOWN IN SS-4.
5. THE SEWER LATERAL LOCATIONS SHALL BE MARKED WITH AN "S" IN THE TOP OF THE CONCRETE CURB.
6. PVC JOINTS OF RUBBER RING MUST COMPLY WITH ASTM D-1869.
7. FOR NEW PROJECTS: EXTEND SEWER LATERAL 9' BEHIND THE BACK OF THE SIDEWALK OR PROPERTY LINE, WHICHEVER IS FURTHER. THE END OF A LATERAL SHALL BE MARKED WITH A 2x4, SET IN THE GROUND, AND HAVE THE END COLORED GREEN.
8. CLEANOUTS SHALL BE REQUIRED EVERY 100'.
9. SEWER PIPE SHALL BE MARKED WITH A 6" DETECTABLE GREEN COLORED LOCATOR TAPE LABELED 'SANITARY SEWER'

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed	SEWER LATERAL CONNECTION	SS-2
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 1



NOTES:

1. BACKFILL: ABOVE THE PIPE ZONE.
   1.1. GRANULAR FILL: PLACE FILL PER APWA SECTION 33 05 20.
   1.2. COMPACT PER APWA SECTION 31 23 26 TO A STANDARD PROCTOR DENSITY OF 95 PERCENT OR GREATER, MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8" WHEN USING RIDING AND 6" WHEN USING HAND COMPACTION EQUIPMENT.
2. LANDSCAPE RESTORATION: LANDSCAPE MUST BE RETURNED TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
3. PAVEMENT RESTORATION: DO NOT INSTALL ANY PORTION OF ASPHALT OR CONCRETE SURFACING UNTIL TRENCH COMPACTION IS ACCEPTABLE TO THE ENGINEER.
4. PEA GRAVEL IS NOT ALLOWED IN ANY PART OF THE TRENCH.
5. STANDARD SEWER MAIN ALIGNMENT SHALL BE 10' WEST OR 10' SOUTH OF THE CENTERLINE IN THE PUBLIC RIGHT-OF-WAY (SEE RD-1).
6. HORIZONTAL CLEARANCE TO ANY WATER MAIN SHALL BE AT LEAST 10' (REFER TO UTAH ADMINISTRATIVE CODE # R309-550).
7. COMPACTION TESTS ARE REQUIRED EVERY 200 LINEAR FEET OF A MAIN INSTALLATION PER APWA SECTION 33 05 20. COMPACTION TESTS ARE REQUIRED AT HALF AND FULL DEPTHS.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed	SEWER PIPE TRENCH	SS-3
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 1

NOTES:

1. COMPACT BACKFILL AND BASE COURSE PER APWA SECTION 31 23 26 TO A DENSITY OF 95 PERCENT OR GREATER, MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8" WHEN USING RIDING AND 6" WHEN USING HAND COMPACTION EQUIPMENT.
   1.1. BACKFILL: PROVIDE AND PLACE PER APWA SECTION 31 23 23 ON ALL SIDES OF THE BASIN.
   1.2. PROVIDE UNTREATED BASE COURSE MATERIAL PER APWA SECTION 32 11 23. PLACE MATERIAL PER APWA SECTION 31 23 23.
2. REINFORCEMENT SHALL BE PER ASTM A 615, GRADE 60, DEFORMED STEEL. REFER TO APWA 03 20 00.
3. CONCRETE SHALL BE PER CLASS 4000 PER APWA SECTION 03 30 04. PLACE CONCRETE PER APWA SECTION 03 30 10. CURE PER APWA SECTION 03 39 00.
4. STATIONING AND ELEVATIONS SHOWN ON THE DRAWING SHOULD MATCH THE CENTERLINE OF THE MANHOLE.
   4.1. FLIN: (FLOW LINE IN) ELEVATION APPLIES TO THE POINT OF INTERSECTION OF THE INLET PIPE INVERT AND THE MANHOLE WALL.
   4.2. FLOUT: (FLOW LINE OUT) ELEVATION APPLIES TO THE PONT OF INTERSECTION OF THE OUTLET PIPE INVERT AND THE MANHOLE WALL.
5. LOW PROFILE MANHOLE LIDS WILL NOT BE ALLOWED IN ANY OGDEN CITY RIGHT OF WAY.
5. LADDER RUNGS ARE REQUIRED IN ALL BOXES. SEE SS-6 FOR TYPICAL MANHOLE STEP REQUIREMENTS.
6. GROUT ALL PIPE OPENINGS WITH 2:1 SAND/CEMENT MORTAR.
7. PLACE FLEXIBLE GASKET-TYPE SEALANT IN ALL MANHOLE JOINTS, SEAL MUST MEET THE REQUIREMENTS OF SS-S-00210 (210A), AASHTO M-198, AND ASTM C990.
8. PRECAST CONCRETE WALLS MUST BE A MINIMUM OF 5" THICK.
9. CAST-IN-PLACE CONCRETE MUST BE A MINIMUM OF 8" THICK.
10. IF DEPTH OF MANHOLE EXCEEDS 6'-7", USE SS-1 AS THE STANDARD FOR CONSTRUCTION.
11. THE INSTALLED PIPE SHALL BE PLACED SUCH THAT THE HORIZONTAL INSIDE DIAMETER OF THE PIPE INTERSECTS THE INSIDE FACE OF THE RISER.
12. PROVIDE A SMOOTH AND NEAT FINISH ON THE INTERIOR OF THE CONES, SHAFT, RINGS, AND FLOOR. IMPERFECT MOLDINGS OR HONEYCOMBS WILL NOT BE ACCEPTED.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed	STORM DRAIN MANHOLE (PRECAST)	SD-4
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 2 OF 2

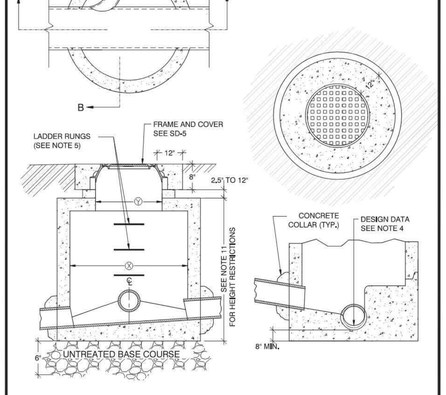


TABLE OF DIMENSIONS	
MANHOLE TYPE	DIMENSION
4'	(X)=48"(Y)=30"
5'	(X)=60"(Y)=44"

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden UTAH Still Untamed	STORM DRAIN MANHOLE (PRECAST)	SD-4
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 2

VCBO ARCHITECTURE

SALT LAKE CITY, UT - HQ
ST. GEORGE, UT
LAIE, HI

524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.576.8800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH — NICHOLE LEE LUTH — 8023335 — 11/08/23

REV	DATE	DESCRIPTION

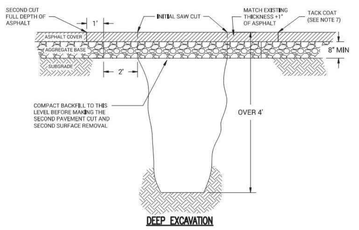
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

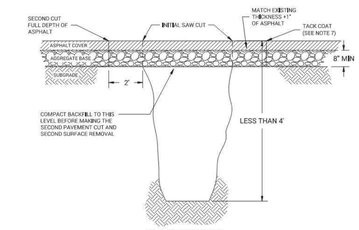
BID SET 5 - GENERAL CONSTRUCTION

CITY DETAILS

C102



DEEP EXCAVATION



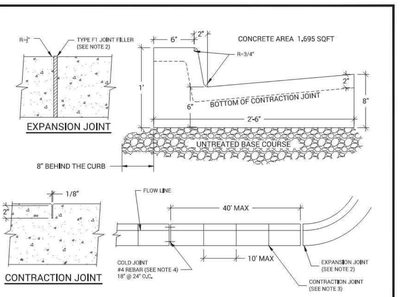
SHALLOW EXCAVATION

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden Utah Salt Unbound	ASPHALT PATCH	RD-3
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 2 2020

NOTES:

1. REMOVE ADDITIONAL PAVEMENT TO THE MENTIONED FEATURE IF IT IS WITHIN TWO FEET OF
   - 1.1. A NEW SAWCUT
   - 1.2. A PAINTED LINE STRIPE
   - 1.3. A LIP OF GUTTER
   - 1.4. A CURB
   - 1.5. AN EXISTING PAVEMENT PATCH
2. ALL EXCAVATIONS WITHIN THE CITY RIGHT-OF-WAY REQUIRE AN EXCAVATION PERMIT FROM THE OGDEN CITY ENGINEERING DEPARTMENT.
   - 2.1. ALL WORK IN THE RIGHT-OF-WAY MUST BE PERFORMED BY A LICENSED CONTRACTOR FOR THE STATE OF UTAH WHO IS BONDED AND INSURED THROUGH OGDEN CITY.
3. NOTIFY UNDERGROUND SERVICE ALERT (BLUE STAKES) TWO (2) WORKING DAYS PRIOR TO THE START OF EXCAVATION AT 1 (800) 662-4111.
4. NOTIFY ENGINEERING DEPARTMENT ONE (1) WORKING DAY (24 HOURS) PRIOR TO START OF CONSTRUCTION TO ARRANGE INSPECTIONS BY CITY PUBLIC WORKS INSPECTORS.
5. ALL EXCAVATIONS SHALL BE MADE, PROTECTED, AND SUPPORTED AS REQUIRED FOR SAFETY BY OSHA REGULATIONS.
6. BASE COURSE: PROVIDE MATERIAL SPECIFIED IN APWA SECTION 32 11 23.
   - 6.1. PLACE MATERIAL PER APWA SECTION 32 05 10.
   - 6.2. COMPACT THE MATERIAL PER APWA SECTION 31 23 26. THE MINIMUM APPROVED COMPACTION SHALL BE 95 PERCENT OR GREATER. MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8" WHEN USING RIDING EQUIPMENT AND 6" WHEN USING HAND HELD COMPACTION EQUIPMENT.
7. TACK COAT PER APWA SECTION 32 12 14, PROVIDE FULL TACK COAT COVERAGE ON ALL VERTICAL SURFACES.
   - 7.1. JOINT REPAIR: IF A CRACK OCCURS AT THE PATCH CONNECTION TO THE EXISTING PAVEMENT OR ANY STREET FIXTURE, SEAL THE CRACK PER APWA SECTION 32 01 17.
8. USE PLANT-MIX ASPHALT PAVING AS PER APWA 32 12 16.13 AND THE CURRENT EDITION OF THE OGDEN CITY STANDARDS.
   - 8.1. MATCH EXISTING THICKNESS PLUS ONE (1) INCH, MINIMUM OF FOUR (4) INCHES, BUT NOT TO EXCEED SEVEN (7) INCHES (OR AS SPECIFIED BY THE CITY ENGINEER).
9. REPAIR THE ASPHALT PAVEMENT IF ANY OF THE FOLLOWING CONDITIONS WITHIN THE PATCH OCCUR:
   - 9.1. PAVEMENT SURFACE DISTORTION EXCEEDS 1/4" DEVIATION IN 10'.
     - 9.1.1. REPAIR OPTION: PLANE OFF SURFACE DISTORTIONS, COAT PLANED SURFACES WITH A CATIONIC OR ANIONIC EMULSION THAT COMPLIES WITH APWA SECTION 32 12 93 AND PROVIDE SAND BLOTTER.
   - 9.2. CRACKS AT LEAST 1" IN LENGTH AND 1/4" WIDE OCCURRING MORE OFTEN THAN ONE (1) IN 10 SQUARE FEET.
     - 9.2.1. REPAIR OPTION: CRACK SEAL
   - 9.3. ASPHALT RAVELING IS GREATER THAN ONE (1) SQUARE FOOT PER 100 SQUARE FEET.
     - 9.3.1. REPAIR OPTION: MILL AND INLAY
10. ALL PAVING, RESURFACING OR REPLACEMENT OF STREET FACILITIES:
    - 10.1. ON MAJOR OR COLLECTOR STREETS SHALL BE DONE WITHIN THREE (3) CALENDAR DAYS.
    - 10.2. ON ALL OTHER STREETS SHALL BE DONE IN WITHIN SEVEN (7) CALENDAR DAYS FROM THE TIME THE EXCAVATION COMMENCES.

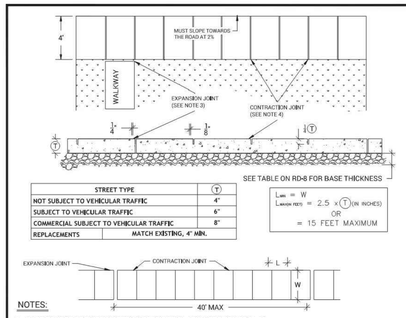
OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden Utah Salt Unbound	ASPHALT PATCH	RD-3
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 2 OF 2 2020



NOTES:

1. BASE COURSE SHALL BE PER APWA SECTION 32 11 23.
   - 1.1. EXTEND BASE 8" BEHIND THE CURB AND GUTTER.
   - 1.2. IF FLOW LINE IS GREATER THAN 0.5 PERCENT (S=0.005), PROVIDE 6" OF COMPACTED BASE COURSE. IF LESS, PROVIDE 8" OF COMPACTED BASE COURSE.
   - 1.3. COMPACT PER APWA SECTION 31 23 26 TO A DENSITY OF 95 PERCENT OR GREATER. MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8" WHEN USING RIDING AND 6" WHEN USING HAND COMPACTION EQUIPMENT.
2. MAKE EXPANSION JOINTS VERTICAL, FULL DEPTH, 1/2" WIDE WITH TYPE F1 JOINT FILLER MATERIAL PER APWA SECTION 32 13 73.
   - 2.1. SET TOP OF FILLER FLUSH WITH THE CONCRETE.
   - 2.2. EXPANSION JOINTS ARE REQUIRED AT THE START OR END OF A STREET INTERSECTION CURB RETURN.
3. MAKE CONTRACTION JOINTS VERTICAL.
   - 3.1. 1/8" WIDE AND 2" DEEP OR 1/4 OF THE SLAB THICKNESS IF THE SLAB IS OVER 8" THICK.
4. USE REINFORCEMENT PER ASTM A 615, GRADE 60, GALVANIZED OR EPOXY COATED DEFORMED STEEL. SEE APWA SECTION 03 20 00 REQUIREMENTS.
5. BAG MIX: MARCH - NOVEMBER 6 1/2, DECEMBER - FEBRUARY 7 1/2.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden Utah Salt Unbound	TYPE A CURB & GUTTER	RD-4
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 1 2020



STREET TYPE	(T)
NOT SUBJECT TO VEHICULAR TRAFFIC	4"
SUBJECT TO VEHICULAR TRAFFIC	6"
COMMERCIAL SUBJECT TO VEHICULAR TRAFFIC	8"
REPLACEMENTS	MATCH EXISTING, 4" MIN.

$L_{MAX} = W$

$L_{MAXIMUM\ RATIO} = 2.5 \times (T\ \text{IN INCHES})$

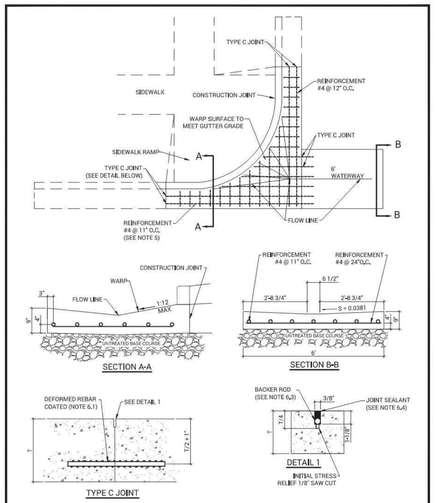
OR

$= 15\ \text{FEET MAXIMUM}$

NOTES:

1. BASE COURSE:PROVIDE MATERIAL SPECIFIED IN APWA SECTION 32 11 23.
   - 1.1. PLACE MATERIAL PER APWA SECTION 32 05 10.
   - 1.2. COMPACT PER APWA SECTION 31 23 26 TO A DENSITY OF 95 PERCENT OR GREATER. MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8" WHEN USING RIDING EQUIPMENT AND 6" WHEN USING HAND COMPACTION EQUIPMENT.
2. CONCRETE: CLASS 4000 PER APWA SECTION 03 30 04.
   - 2.1. CONCRETE MUST INCREASE FROM 4" THICK TO 6" FOR RESIDENTIAL DRIVEWAYS AND TO 8" FOR COMMERCIAL DRIVEWAYS.
   - 2.2. PLACE CONCRETE PER APWA SECTION 03 30 10.
   - 2.3. PROVIDE 1/2" RADIUS ON CONCRETE EDGES EXPOSED TO PUBLIC VIEW.
3. EXPANSION JOINT: MAKE EXPANSION JOINTS VERTICAL, FULL DEPTH, 1/2" WIDE WITH TYPE F1 JOINT FILLER MATERIAL PER APWA SECTION 32 13 73.
   - 3.1. SET TOP OF FILLER FLUSH WITH SURFACE OF CONCRETE.
   - 3.2. EXPANSIONS JOINTS REQUIRED AT CURB RETURNS, APPROACHES, AND ADJOINING WALKWAYS.
4. CONTRACTION JOINT: MAKE CONTRACTION JOINTS VERTICAL, TYPICAL SLAB RATIO IS 1 TO 1.
   - 4.1. 1/8" WIDE AND 1" DEEP (OR ¼ SLAB THICKNESS IF SLAB IS GREATER THAN 4" THICK).
   - 4.2. MAXIMUM LENGTH TO WIDTH RATIO FOR NON-SQUARE PANELS IS 1.5 TO 1.
5. BAG MIX: MARCH - NOVEMBER 6 1/2, DECEMBER - FEBRUARY 7 1/2.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden Utah Salt Unbound	SIDEWALK DETAIL	RD-5
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 1 2020



OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden Utah Salt Unbound	WATERWAY TRANSITION STRUCTURES	RD-6
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 1 OF 2 2020

NOTES:

1. UNTREATED BASE COURSE: PROVIDE MATERIAL AS PER APWA 32 11 23. REQUIRES 8" OF BASE FOR WATERWAYS SUBJECT TO ANY VEHICULAR TRAFFIC.
   - 1.1. PLACE MATERIAL PER APWA SECTION 32 05 10.
   - 1.2. COMPACT PER APWA SECTION 31 23 26 TO A DENSITY OF 95 PERCENT OR GREATER. MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8" WHEN USING RIDING AND 6" WHEN USING HAND HELD COMPACTION EQUIPMENT.
2. CONCRETE: CLASS 4000 AS PER APWA 03 30 04.
   - 2.1. PROVIDE 1/2" RADIUS ON CONCRETE EDGES EXPOSED TO VIEW.
3. EXPANSION JOINTS SHALL BE VERTICAL, FULL DEPTH 1/2" WIDE, USE TYPE F1 JOINT FILLER AS PER APWA 32 13 73. SET TOP OF FILLER FLUSH WITH CONCRETE SURFACE.
4. CONTRACTION JOINTS SHALL BE VERTICAL, 1/8" WIDE AND 2" DEEP (OR 1/4 SLAB THICKNESS IF SLAB IS OVER 8").
   - 4.1. MAXIMUM PANEL LENGTH OF WATERWAY IS 15'.
5. REINFORCEMENT SHALL BE PER ASTM A 615, GRADE 60 GALVANIZED OR EPOXY COATED DEFORMED STEEL. SEE APWA SECTION 03 20 00 REQUIREMENTS.
6. TYPE C JOINT:
   - 6.1. REINFORCEMENT: SPACE BARS 12" TO 15" ON CENTER. GREASE DOWELS TO PROVIDE MOVEMENT IN EXPANSION JOINTS.
   - 6.2. JOINTS: LAY OUT JOINTS TO AID CONSTRUCTION AND CONTROL RANDOM CRACKING.
     - 6.2.1. LONGITUDINAL JOINT SPACING IS 12' FOR CONCRETE PAVEMENT LESS THAN 9" THICK AND 15' FOR PAVEMENT OVER 9" THICK.
     - 6.2.2. TRANSVERSE JOINT SPACING IS 30xT (SLAB THICKNESS IN FEET) WHERE THE MAXIMUM SLAB LENGTH TO SLAB WIDTH RATION IS 1.5 TO 1.
     - 6.2.3. EXTEND TRAVERSE CONTRACTION JOINTS CONTINUOUSLY ACROSS THE FULL WIDTH OF THE CONCRETE. MATCH JOINTS WITH CURB AND GUTTER.
   - 6.3. BACKER ROD:TYPE 1 (ROUND ROD) APWA SECTION 32 13 73. IT MUST BE OVERSIZED APPROXIMATELY 25 PERCENT TO FIT TIGHTLY INTO EACH JOINT AND COMPATIBLE WITH HOT POURED SEALANT.
   - 6.4. JOINT SEALANT:HOT APPLIED, APWA SECTION 32 13 73. REMOVE DIRT, OIL AND CURING COMPOUNDS FROM JOINT RESERVOIR. SEAL JOINTS IMMEDIATELY AFTER CLEANING.
7. BAG MIX: MARCH - NOVEMBER 6 1/2, DECEMBER - FEBRUARY 7 1/2.

OGDEN CITY ENGINEERING - STANDARD DRAWINGS		
Ogden Utah Salt Unbound	WATERWAY TRANSITION STRUCTURES	RD-6
	JUSTIN ANDERSON, CITY ENGINEER	SHEET 2 OF 2 2020

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH
11/08/23
NICHOLE LEE LUTH
8023335

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

CITY DETAILS

C103

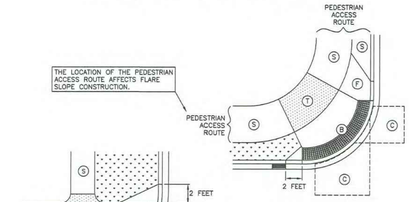
Corner curb cut assembly

1. **GENERAL**
   A. Where existing elements or spaces are altered to receive an assembly; slopes and dimensions shall comply with slopes and dimensions shown on the drawing, or to the maximum extent feasible permitted by the ENGINEER. Final configuration of the assembly may be different than shown. Where physical constraints (e.g. utility covers, poles, vaults, etc.) prevent compliance, a single diagonal curb cut assembly may serve both pedestrian street crossings.
   B. Installation of flares or curb returns is ENGINEER's choice.
   C. Definitions and supplemental requirements are specified in APWA Section 32 16 14.

2. **PRODUCTS**
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
   C. Detectable Warning Surface: Paver, ribbed composite panel, or tile. Provide a color that contrasts with adjacent walking surface, either light-on-dark or dark-on-light. ENGINEER to select type and color unless indicated elsewhere.
   D. Concrete: Class 4000, APWA Section 03 30 04.
   E. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.

3. **EXECUTION**
   A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
   B. Curb Modifications:
      1) The sloped surface created to accommodate a flare area shall be perpendicular to the back of curb.
      2) No grade break shall exist between the flow-line and the foot of the curb ramp or blended transition. Length of the curb modification abutting the curb ramp or transition is 4 feet minimum for each crosswalk served.
   C. Curb Ramp: Length not required to exceed 15 feet. Grade breaks are perpendicular to the direction of ramp run and are not permitted on ramp or turning space surface. Sides are parallel to each other and perpendicular to the ends. At the bottom grade break it may be necessary to install a transition zone, (APWA Plan 238).
   D. Concrete Placement: APWA Section 03 30 10.
      1) Maximum length to width ratio for rectangular panel joints is 1.5 to 1. Joint spacing measured in feet not to exceed twice slab thickness measured in inches or a maximum of 15 feet.
      2) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface. Install contraction joints vertical, 1/8-inch wide, and 1/4 of the depth of the concrete flatwork.
      3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
   E. Clear Space: No trip hazards in the clear space.

TURNING SPACE AT SIDEWALK LEVEL



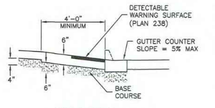
EXAMPLE A

EXAMPLE B

ELEMENT		DIMENSION
R	B	4 FEET WIDE MINIMUM
C	T	4 FEET SQUARE MINIMUM

WHERE TURNING SPACE IS CONSTRAINED ON 2 SIDES, PROVIDE 5 FEET IN THE DIRECTION OF THE CROSSWALK

TABLE OF DIMENSIONS



MATERIALS

		RUNNING SLOPE (%) MAXIMUM	CROSS SLOPE (%) MAXIMUM
TURNING SPACE	T	2	2
CURB RAMP	R	8.33	2 (c)
BLENDED TRANSITION	B	5	2 (c)
CLEAR SPACE	C	5	2 (c)
SIDEWALK	S	STREET GRADE	2
FLARE	F	10	--

(a) RUNNING SLOPE IS IN THE DIRECTION OF PEDESTRIAN TRAVEL. RUNNING SLOPE OF FLARE IS PARALLEL TO BACK OF CURB
(b) CROSS SLOPE IS PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAVEL
(c) SLOPE MAY EQUAL STREET OR HIGHWAY GRADE AT CROSSWALKS THAT ARE WITHOUT VEHICULAR YIELD OR STOP CONTROL

SLOPE TABLE

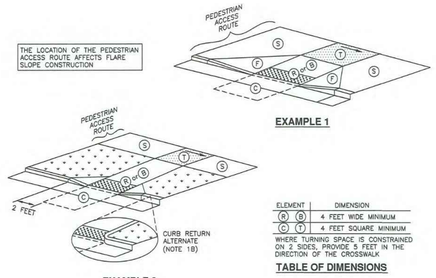
Midblock curb cut assembly

1. **GENERAL**
   A. Where existing elements or spaces are altered to receive an assembly; slopes and dimensions shall comply with slopes and dimensions shown on the drawing, or to the maximum extent feasible permitted by the ENGINEER. Final configuration of the assembly may be different than shown.
   B. Installation of flares or curb returns is ENGINEER's choice.
   C. Definitions and supplemental requirements are specified in APWA Section 32 16 14.

2. **PRODUCTS**
   A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73..
   C. Detectable Warning Surface: Paver, ribbed composite panel, or tile. Provide a color that contrasts with adjacent walking surface, either light-on-dark or dark-on-light. ENGINEER to select type and color unless indicated elsewhere.
   D. Concrete: Class 4000, APWA Section 03 30 04.
   E. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.

3. **EXECUTION**
   A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
   B. Curb Modifications:
      1) The sloped surface created to accommodate a flare area shall be perpendicular to the back of curb.
      2) No grade break shall exist between the flow-line and the foot of the curb ramp or blended transition. Length of the curb modification abutting the curb ramp or transition is 4 feet minimum.
   C. Curb Ramp: Length not required to exceed 15 feet. Grade breaks are perpendicular to the direction of ramp run and are not permitted on the ramp or turning space surface. Sides are parallel to each other and perpendicular to the ends.
   D. Concrete Placement: APWA Section 03 30 10.
      1) Maximum length to width ratio for rectangular panel joints is 1.5 to 1. Joint spacing measured in feet not to exceed twice slab thickness measured in inches or a maximum of 15 feet.
      2) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface. Install contraction joints vertical, 1/8-inch wide, and 1/4 of the depth of the concrete flatwork.
      3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
   E. Clear Space: No trip hazards in the clear space.

TURNING SPACE AT SIDEWALK LEVEL



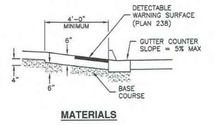
EXAMPLE 1

EXAMPLE 2

ELEMENT		DIMENSION
R	B	4 FEET WIDE MINIMUM
C	T	4 FEET SQUARE MINIMUM

WHERE TURNING SPACE IS CONSTRAINED ON 2 SIDES, PROVIDE 5 FEET IN THE DIRECTION OF THE CROSSWALK

TABLE OF DIMENSIONS



MATERIALS

		RUNNING SLOPE (%) MAXIMUM	CROSS SLOPE (%) MAXIMUM
TURNING SPACE	T	STREET GRADE	2
CURB RAMP	R	8.33	2 (c)
BLENDED TRANSITION	B	5	2 (c)
CLEAR SPACE	C	5	2 (c)
SIDEWALK	S	STREET GRADE	2
FLARE	F	10	--

(a) RUNNING SLOPE IS IN THE DIRECTION OF PEDESTRIAN TRAVEL. RUNNING SLOPE OF FLARE IS PARALLEL TO BACK OF CURB
(b) CROSS SLOPE IS PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAVEL

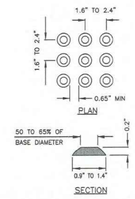
SLOPE TABLE

Detectable warning surface

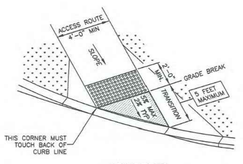
1. **GENERAL**
   A. Detectable warnings consist of a surface of truncated domes aligned in a square or radial grid pattern with dome size, dome spacing, contrast and panel size as indicated.
   C. Definitions and supplemental requirements are specified in APWA Section 32 16 14.

2. **PRODUCTS**
   A. Pavers:
      1) Concrete, APWA Section 32 14 13.
      2) Brick and Mortar, APWA Section 32 14 16.
   B. Tile: Unless indicated elsewhere, selection is by CONTRACTOR as allowed by ENGINEER.
   C. Ribbed Composite Panel: Unless indicated elsewhere, selection is by CONTRACTOR as allowed by ENGINEER.
   D. Bedding Sand, Joint Sand, Geotextile: APWA Section 32 14 13.

3. **EXECUTION**
   A. Layout:
      1) Joints Between Units: 3/16 inch maximum or manufacturer's recommendation.
      2) Flares: Do not install detectable warning units on flared surfaces.
      3) Alignment: Where a ramp, turning space, or blended transition provides access to the street continuously around a corner, align the vertical rows of truncated domes to be perpendicular or radial to the grade break between the ramp and the street for a 4 feet minimum width for each crosswalk served.
      4) Transition 1 or 2: Selection is by ENGINEER unless indicated elsewhere.
      5) At Rail Crossings: The edge of the detectable warning surface nearest the rail crossing is 6 feet minimum and 15 feet maximum from the centerline of the nearest rail.
   B. Paver Installation: APWA Section 32 14 13. If paver must be cut, minimum paver cut length is 3/4 paver, or 1/2 paver length providing the adjacent paver is also reduced no more than 1/2 its original length. Do not cut pavers longitudinally. Remove domes that were cut.
   C. Tile Installation: Install according to manufacturer's recommendations. Remove domes that were cut.
   D. Ribbed Composite Panel Installation: Install according to manufacturer's recommendation. Remove domes that were cut. Seal cuts to prevent water intrusion.

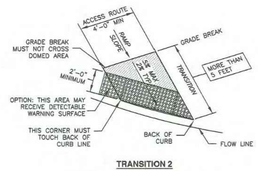


TRUNCATED DOME DETAIL



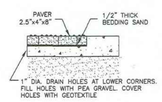
TRANSITION 1

PERPENDICULAR ASSEMBLY



NON-PERPENDICULAR ASSEMBLY

TRANSITION 2



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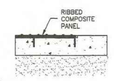

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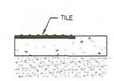

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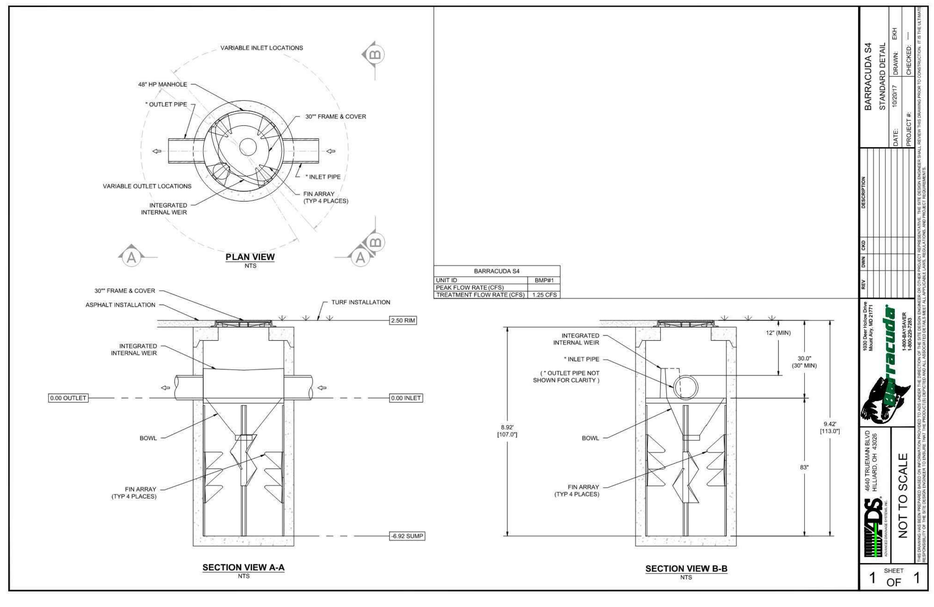

HYDRODYNAMIC SEPARATOR (HS) A
N.T.S.

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ST. GEORGE, UT
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524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.576.8800
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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH — NICHOLE LEE LUTHI — 11/08/23 — 8023335

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

CITY DETAILS

C104

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

ADS Advanced Drainage Systems, Inc.

ADS SiteAssist FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

HILLCREST ELEMENTARY SCHOOL

OGDEN, UT, USA

SC-740 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-740.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (+1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%, THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

1. STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT!" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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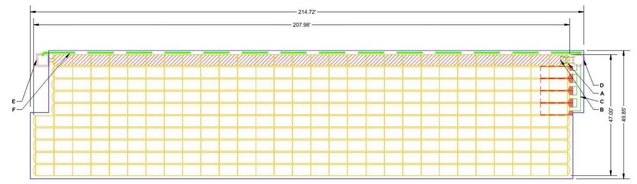
PROPOSED LAYOUT		PROPOSED ELEVATIONS:	*INVERT ABOVE BASE OF CHAMBER
295	STORMTECH SC-740 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	4463.93
20	STORMTECH SC-740 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	4463.00
1	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	4463.00
6	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	4463.49
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	4463.49
22400	INSTALLED SYSTEM VOLUME (CF) (INCLUDES STONE VOID AND COVER STONE INCLUDED)	TOP OF STONE:	4463.49
		TOP OF SC-740 CHAMBER:	4463.09
		12" (300 mm) MIN COVER:	4463.09
		12" (300 mm) TYP SC-740 CHAMBER:	4463.09
		12" (300 mm) TYP SC-740 CHAMBER:	4459.49
		6" (150 mm) TYP SC-740 CHAMBER:	4459.09
		BOTTOM OF STONE:	4458.93
10423	SYSTEM AREA (SF)	24" ISOLATOR ROW PLUS INVERT:	4459.41
529.1	SYSTEM PERIMETER (ft)	BOTTOM OF SC-740 CHAMBER:	4459.49
1837	THERMOPLASTIC LINER (SY) (20% OVERAGE)	UNDERDRAIN INVERT:	4458.93
		BOTTOM OF STONE:	4458.93

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
	A	24" BOTTOM PREFABRICATED EZ END CAP. PART#: SC740ECEZ / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	0.10"	
	B	INSTALL FLAMP ON 24" ACCESS PIPE. PART#: SC74024ARAMP		
	C	15" x 15" TOP MANIFOLD. ADS N-12	9.00"	
	D	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		9.4 CFS IN
	E	OCS (DESIGN BY ENGINEER / PROVIDED BY OTHERS)		2.0 CFS OUT
	F	6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		



ISOLATOR ROW PLUS (SEE DETAIL)

PLACE MINIMUM 12.50' OF ADSPLUS125 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

THERMOPLASTIC LINER (SEE TECH NOTE #6.50 PROVIDED BY OTHERS / DESIGN BY OTHERS)

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE IN-SITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS FOR CISTERN/ RAINWATER HARVESTING. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.
- **NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

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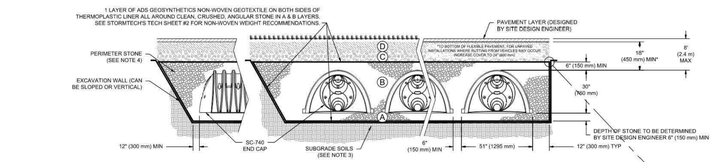
SHEET 2 OF 5

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[3,4]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



THERMOPLASTIC LINER DETAIL

NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%, THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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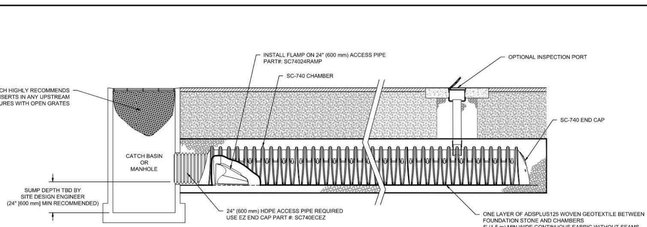
SHEET 3 OF 5



SC-740 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

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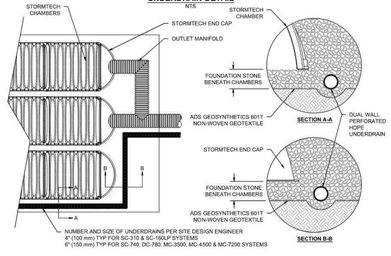
UNDERDRAIN DETAIL

NTS



SC-740 TECHNICAL SPECIFICATION

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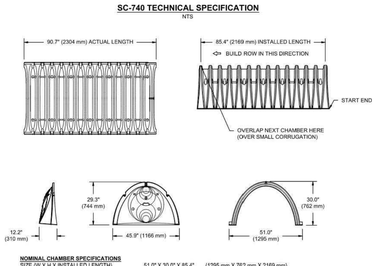
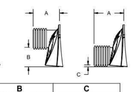


NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "SRE"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	16.5" (419 mm)	---
SC740EPE06B / SC740EPE06BPC				0.5" (13 mm)
SC740EPE08T / SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC				0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (366 mm)	---
SC740EPE10B / SC740EPE10BPC				0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC				1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC				1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC				1.6" (41 mm)
SC740ECEZ*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740ECEZ THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE ¼-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

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SHEET 5 OF 5

VCBO ARCHITECTURE

SALT LAKE CITY, UT - HQ
ST. GEORGE, UT
LAIE, HI

524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.576.8800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH — LICENSED PROFESSIONAL ENGINEER — NICHOLE LEE UTH — 8023335 — 11/08/23

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

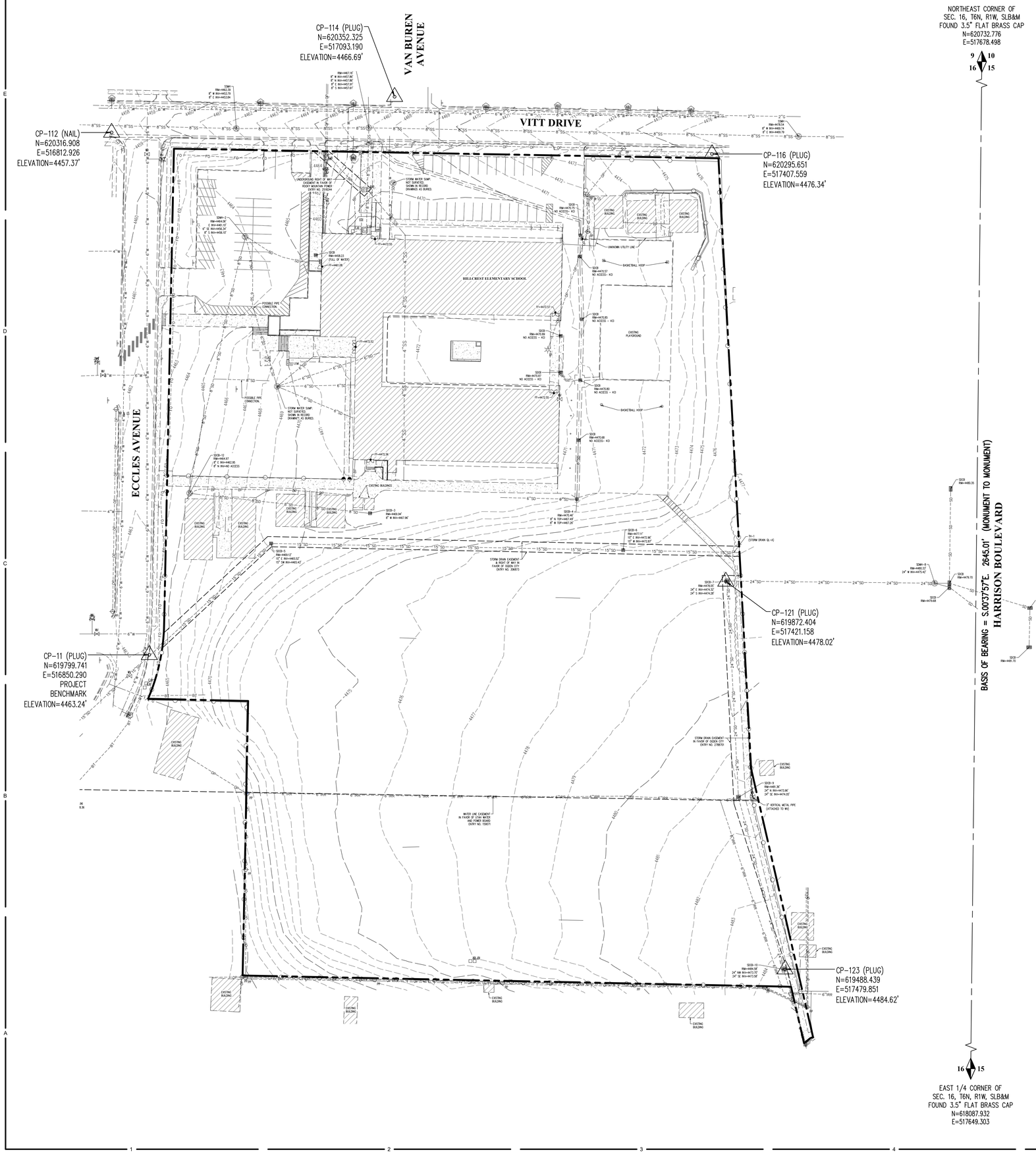
BID SET 5 - GENERAL CONSTRUCTION

STORMTECH DETAILS

C105

25 YEARS OF EXCELLENCE — MERIDIAN ENGINEERING

BLUE STAKES OF UTAH 811 — Utah's Way of Digging



SURVEYOR'S CERTIFICATE

I, MICHAEL W. WADEAU, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, HOLDING CERTIFICATE NUMBER 4938744, AS PRESCRIBED BY THE LAWS OF THE STATE OF UTAH AND STATE THAT INFORMATION SHOWN ON THIS PLAT HAS BEEN OBTAINED THROUGH SURFACE SURVEYS OF STRUCTURES, UTILITIES AND IMPROVEMENTS VISIBLE TO THE SURVEYOR AT THE TIME OF THE SURVEY. UNDERGROUND STRUCTURES, UTILITIES AND IMPROVEMENTS HAVE NOT BEEN SURVEYED. UNDERGROUND FEATURES, INCLUDING ELEVATIONS, SIZES, TYPES, CAPACITIES AND DIMENSIONS ARE SHOWN GRAPHICALLY AS OBTAINED THROUGH MUNICIPAL OR GOVERNING ENTITY RECORDS AND MAPS. INFORMATION AS REPRESENTED HEREON DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.

4938744
MICHAEL W. WADEAU
UTAH LICENSED

MICHAEL W. WADEAU
PLS NO. 4938744

EXISTING TOPO NOTES:

1. THIS SURVEY AND CONTROL POINTS SHOWN WERE ESTABLISHED BY MERIDIAN ENGINEERING, INC. IN MARCH OF 2023. ALL CONTROL POINTS SHOULD BE VERIFIED PRIOR TO CONSTRUCTION ACTIVITIES TO ENSURE THEY ARE STILL INSIDE AN ACCEPTABLE MEASUREMENT TOLERANCE.
2. CONTROL POINT ELEVATIONS SHOWN WERE DERIVED FROM THE PROJECT BENCHMARK USING DIFFERENTIAL LEVELING.
3. THE LOCATIONS OF UNDERGROUND STRUCTURES, UTILITIES OR IMPROVEMENTS AS SHOWN HEREON ARE BASED ON ABOVE GROUND APPURTENANCES VISIBLE AT THE TIME OF THE SURVEY TO THE SURVEYOR. EXACT LOCATIONS OF UNDERGROUND STRUCTURES, UTILITIES OR IMPROVEMENTS MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL UNDERGROUND STRUCTURES, UTILITIES OR IMPROVEMENTS MAY EXIST.
4. ELEVATIONS, SIZES, TYPES AND CONDITIONS OF UNDERGROUND STRUCTURES, UTILITIES OR IMPROVEMENTS AS SHOWN ON THIS PLAT ARE APPROXIMATE ONLY AND SHOULD BE VERIFIED WITH THE APPROPRIATE AGENCY OR CONTROLLING PARTY BEFORE DESIGN OR CONSTRUCTION.
5. ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS, FACILITIES, DEPOSITS OR DISPOSALS THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS PROPERTY.
6. UNLESS OTHERWISE SHOWN, NO ATTEMPT HAS BEEN MADE AS PART OF THIS PLAT AND THE SURVEY ON WHICH IT IS BASED TO DISCLOSE THE LOCATIONS, SIZE, TYPE OR CONDITION OF ANY TREE, HEDGE, GROUND COVER, LAWN, PLANTINGS OR ANY OTHER LANDSCAPING OR SPRINKLER HEADS, PIPES OR ANY APPURTENANT PARTS THEREOF. ADDITIONAL LANDSCAPING OR IRRIGATION FACILITIES MAY EXIST.
7. CONTRACTOR MUST OBTAIN A PERMIT BEFORE BEGINNING WORK WITHIN THIRTY FEET OF AN ESTABLISHED COUNTY SURVEY MONUMENT, PER UTAH STATE CODE 17-23-14 SUBSECTIONS 2 AND 4.

LEGEND

- PROPERTY BOUNDARY
- SECTION LINE
- EASEMENT LINE
- SD — EXISTING STORM DRAIN LINE
- SS — EXISTING SEWER LINE
- W — EXISTING WATER LINE
- G — EXISTING GAS LINE
- IRR — EXISTING IRRIGATION
- FO — EXISTING FIBER OPTIC LINE
- OP — EXISTING OVERHEAD POWER LINE
- BP — EXISTING BURIED POWER LINE
- EXISTING CHAIN LINK FENCE
- EXISTING CURB & GUTTER
- XXXX' EXISTING MAJOR CONTOUR LINE
- XXXX' EXISTING MINOR CONTOUR LINE
- EXISTING BUILDING
- EXISTING CONCRETE
- EJB EXISTING ELECTRICAL BOX
- IB EXISTING IRRIGATION BOX
- SS EXISTING SEWER MANHOLE
- SD EXISTING STORM DRAIN MANHOLE
- EXISTING CATCH BASIN
- LP EXISTING LIGHT POLE
- ET EXISTING ELECTRICAL TRANSFORMER
- WV EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- WM EXISTING WATER METER
- EXISTING GATE POST
- EXISTING SIGN
- LP EXISTING LIGHT POLE
- LP EXISTING OUTDOOR DECORATIVE LIGHT
- FLAG EXISTING FLAG POLE
- EXISTING CONTROL POINT AS NOTED
- FOUND SECTION CORNER

MERIDIAN ENGINEERING

0 40 80
SCALE 1"=40'

VCBO ARCHITECTURE
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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

EXISTING SURVEY AND TOPOGRAPHY

C200

Blue Stakes of Utah 811 Call before you dig

MERIDIAN ENGINEERING 25 YEARS OF EXCELLENCE

NOTES:

1) THERE ARE ABOUT 10.28 ACRES WITHIN THE PROJECT BOUNDARY THAT WILL BE DISTURBED WITH NEW CONSTRUCTION OR CONTRACTOR STORAGE ACTIVITIES.

SEQUENCE OF CONSTRUCTION ACTIVITIES:

1) FIELD MARK LIMIT OF DISTURBANCE FOR APPROVAL BY OGDEN CITY AND OBTAIN A STORM WATER MANAGEMENT PERMIT AS NEEDED BY OGDEN CITY.

2) INSTALL SILT FENCE AND/OR ENVIRONMENTAL FENCE AROUND PERIMETER OF PROJECT AS INDICATED ON THIS PLAN SHEET.

3) INSTALL SEDIMENT CONTROL MEASURES INDICATED IN ALL EXISTING STORM DRAIN INLETS ADJACENT TO THE CONSTRUCTION SITE.

4) CONTRACTOR WILL BEGIN DEMOLITION, GRADING, EXCAVATION, AND CONSTRUCTING UTILITY SITE IMPROVEMENTS. AS NEW DRAINAGE ELEMENTS ARE COMPLETED, CONSTRUCT SEDIMENT PROTECTION AT ALL NEW INLETS.

5) AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WILL BE STABILIZED WITH SOD IN LANDSCAPED AREAS AND PAVEMENT IN PARKING AND DRIVEWAY AREAS. SITE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION ACTIVATES TO BE COMPLETED WITHIN 21 DAYS OF FINISHING AN AREA TO THE FINAL LINES AND GRADES INDICATED ON THE GRADING PLAN.

6) UPON LANDSCAPE ESTABLISHMENT, REMOVE TEMPORARY MEASURE & CLEAN STORM DRAIN SYSTEM PRIOR TO RELEASE OF SYSTEM TO THE OWNER.

RUNOFF COEFFICIENTS AND DISCHARGE:

1) THE EXISTING RUNOFF COEFFICIENT FOR THE PROJECT AREA IS ESTIMATED TO BE 0.34 THE NEW RUNOFF COEFFICIENT WILL BE APPROXIMATELY 0.52 FOR THE NEW IMPROVEMENTS.

2) RUNOFF WILL BE COLLECTED ON SITE AND DETAINED IN AN UNDERGROUND DETENTION POND.

POST CONSTRUCTION STORM WATER MANAGEMENT PRACTICES:

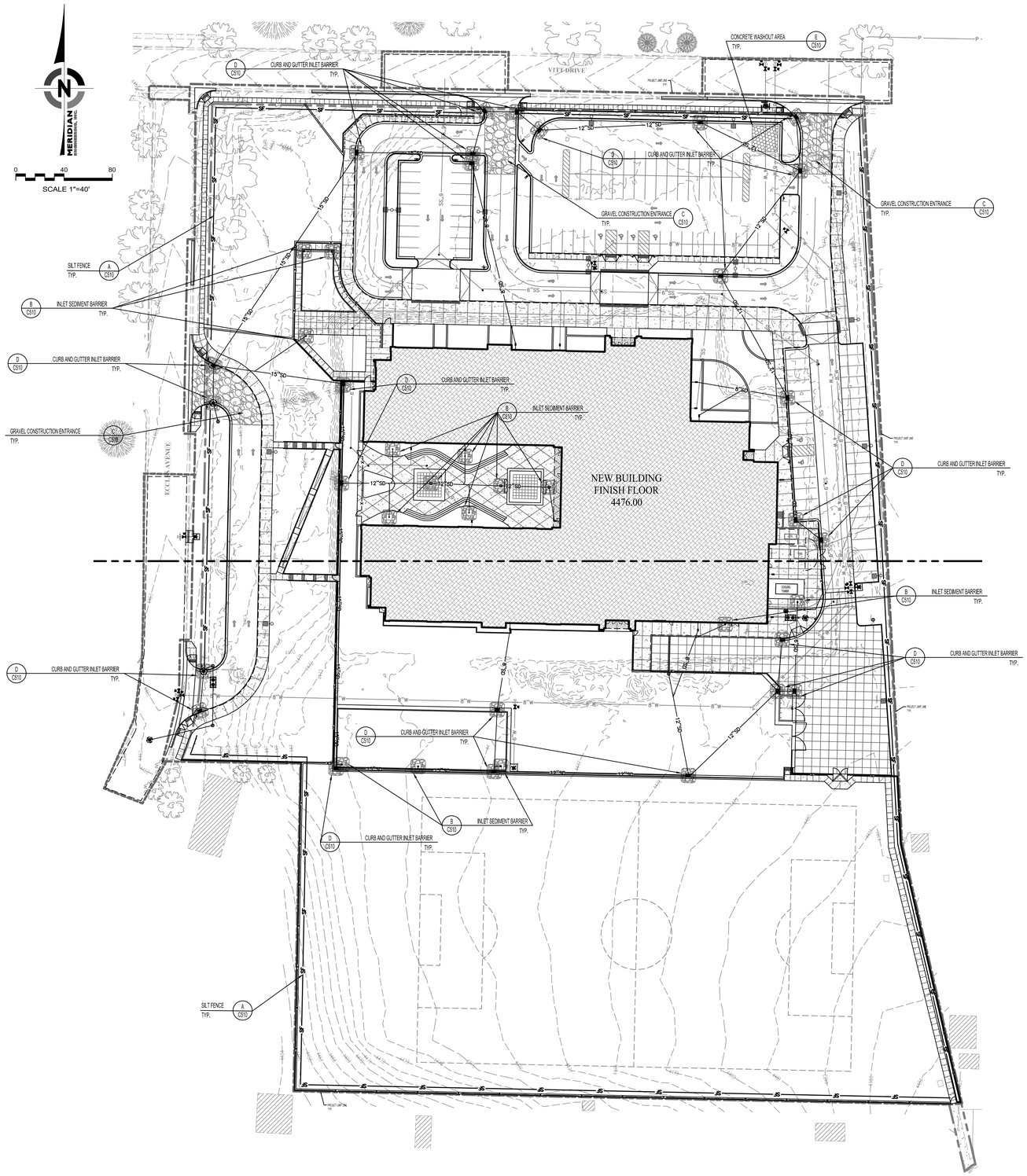
1) THE OWNER WILL SUBMIT POST CONSTRUCTION BEST MANAGEMENT PRACTICES TO OGDEN.

GENERAL STORM WATER POLLUTION CONTROL NOTES:

1) SEE C510 FOR STORM WATER POLLUTION CONTROL NOTES AND GENERAL PRACTICES.

2) ALL CONSTRUCTION PERIOD BEST MANAGEMENT PRACTICES ARE TO BE INSPECTED AND MAINTAINED AT LEAST WEEKLY, ALSO BEFORE AND AFTER EACH STORM EVENT.

3) CONTRACTOR SHALL BE REQUIRED TO KEEP RECORD OF ALL INSPECTIONS AND MAINTENANCE ON SITE WITH THE STORM WATER POLLUTION PREVENTION PLAN.



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH
NICHOLE LEE LUTH
8023335
11/08/23

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

EROSION CONTROL PLAN

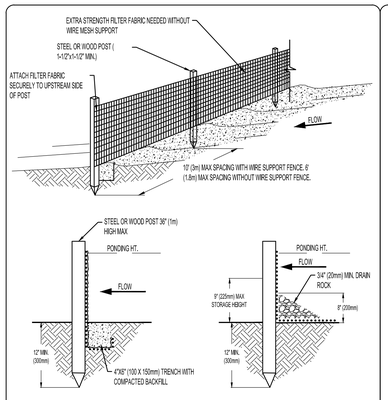
C500

SILT FENCES, INSTALLATION OF SILT FENCES NOTE:

1. DIG OR TRENCH A FOUR INCH WIDE BY SIX INCH DEEP TRENCH. THE LENGTH OF THE SILT FENCE
2. ROLL OUT SILT FENCE MATERIAL ALONG THE FRONT OF THE TRENCH SUCH THAT THE STAKES WILL BE ON THE DOWNSTREAM SIDE AND THE BOTTOM FLAP LAY IN THE TRENCH.
3. STARTING AT ONE END, DRIVE THE FIRST STAKE AT LEAST 10 INCHES INTO THE GROUND. NOTE THAT THE STAKE MUST BE DRIVEN FAR ENOUGH INTO THE GROUND SO THAT 8 - 12 INCHES OF MATERIAL REMAINS IN THE GROUND.
4. AT THE NEXT STAKE, PULL THE MATERIAL TAUT BEFORE DRIVING THE SECOND STAKE INTO THE GROUND. NOTE THAT THE STAKE MUST BE DRIVEN FAR ENOUGH INTO THE GROUND SO THAT 8 - 12 INCHES OF MATERIAL REMAINS IN THE GROUND.
5. REPEAT STEP 4 UNTIL THE STAKES ARE DRIVEN INTO THE GROUND.
6. WHEN ATTACHING TWO LENGTHS OF FENCE TOGETHER, DO THE FOLLOWING:
   - 6.1 PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
   - 6.2 ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION, TO CREATE A TIGHT SEAL WITH THE FENCE MATERIAL.
   - 6.3 DRIVE BOTH POST INTO THE GROUND SO THAT 8 - 12 INCHES OF MATERIAL REMAINS IN THE GROUND.

EROSION CONTROL GENERAL NOTES:

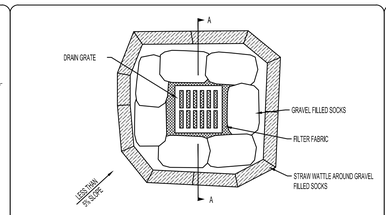
1. AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DUE TO WIND AND RUNOFF. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING THE EROSION CONTROL FACILITIES SHOWN.
2. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DUE TO UNFORESEEN PROBLEMS OR IF THE PLAN DOES NOT FUNCTION AS INTENDED. A REPRESENTATIVE OF THE CITY PUBLIC WORKS DEPARTMENT MAY REQUIRE ADDITIONAL CONTROL DEVICES UPON INSPECTION OF PROPOSED FACILITIES.
3. ALL BEST MANAGEMENT PRACTICES AND EROSION CONTROL MEASURES ARE TO CONFORM TO THE CITY LAND DISTURBANCE DESIGN AND CONSTRUCTION STANDARDS.
4. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STREETS CLEAN AND FREE FROM DEBRIS DEPOSITED BY TRAFFIC FROM THE SITE.
5. ALL STORM DRAIN FACILITIES ON SITE AND ADJACENT TO THE SITE NEED TO BE PROTECTED FROM SITE RUNOFF. INLET PROTECTION DEVICES SHALL BE INSTALLED IMMEDIATELY AS INDIVIDUAL INLETS ARE INSTALLED.
6. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE PAVED, SEEDED WITH NATIVE VEGETATION OR LANDSCAPED. REFER TO LANDSCAPE PLANS FOR SEED MIX AND PLANTING SPECIFICATIONS.
7. EROSION CONTROL STRUCTURES BELOW SODDED AREAS MAY BE REMOVED ONCE SOD AND FINAL LANDSCAPING ARE IN PLACE. EROSION CONTROL STRUCTURES BELOW SEEDED AREAS MUST REMAIN IN PLACE UNTIL THE ENTIRE AREA HAS ESTABLISHED A MATURE COVERING OF HEALTHY VEGETATION. EROSION CONTROL IN PROPOSED PAVEMENT AREAS SHALL REMAIN IN PLACE UNTIL PAVEMENT IS COMPLETE.
8. CONTRACTOR SHALL USE VEHICLE TRACKING CONTROL AT ALL LOCATIONS WHERE VEHICLES WILL ENTER OR EXIT THE SITE. CONTROL FACILITIES SHALL BE MAINTAINED WHILE CONSTRUCTION IS IN PROGRESS. MOVED WHEN NECESSARY AND REMOVED WHEN THE SITE IS PAVED.
9. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, ETC.) SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTACT WITH STORM WATER DISCHARGES FROM THE SITE.
10. BLOWING DUST MUST BE CONTROLLED AT ALL TIMES. SITE WATERING SHALL BE USED TO CONTROL DUST. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS ABSOLUTELY PROHIBITED.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, GRAVEL BAGS, ETC.) DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT.
12. ALL OFF-SITE CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF BITUMINOUS PAVING FOR ROAD CONSTRUCTION.
13. ALL MEASURES CONTAINED IN THIS PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A RAINFALL EVENT. ANY NEEDED CLEANING AND REPAIRS SHALL BE DONE IMMEDIATELY UPON DISCOVERY.
14. ALL UTILITY LINES SHALL BE CLEANED OF DIRT AND DEBRIS PRIOR TO BEING PUT INTO SERVICE. DOWN-GRADE LINES MUST BE PROTECTED FROM WASH-WATER DURING THE CLEANING TO AVOID CONTAMINATION AND COMPROMISING OUTFALL CLEANLINESS.



NOTES:

1. SILT FENCE SHALL BE PLACED ON THE SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY, 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

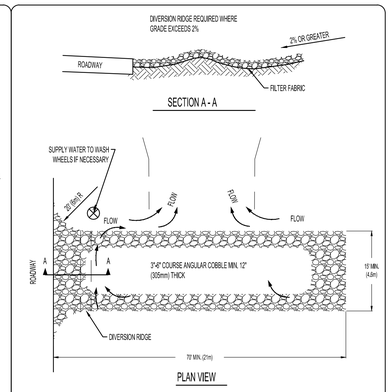
SILT FENCE — N.T.S. — **A**



NOTES:

1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%).
2. EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWN SLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWN SLOPE SIDE OF THE STRUCTURE.

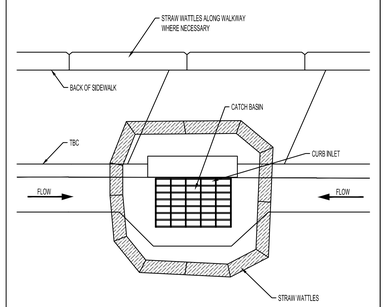
INLET SEDIMENT BARRIER — **B**



NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO THE APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

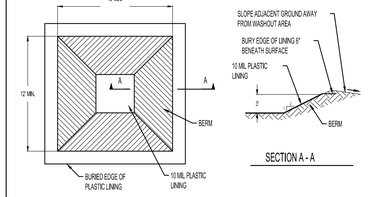
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT — **C**



NOTES:

1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LEES THAN 5%)
2. EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWN THE SLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWN SLOPE SIDE OF THE STRUCTURE.

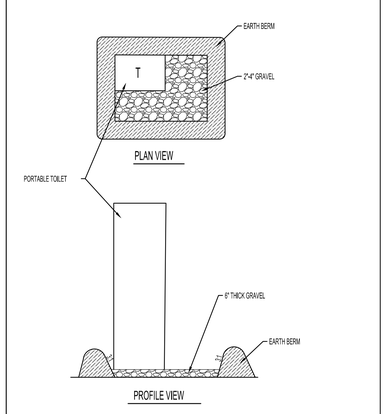
CURB AND GUTTER INLET SEDIMENT BARRIER — **D**



NOTES:

1. CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. PLASTIC LINING MATERIAL SHALL BE OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
3. A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT IS REQUIRED IF ACCESS TO CONCRETE WASHOUT AREA IS OFF PAVEMENT.
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
6. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN ACCEPTED WASTE SITE.
7. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CITY.

CONCRETE WASHOUT AREA — **E**



NOTES:

1. CONTRACTOR TO LOCATE ON SITE BASED ON TRAILER LOCATION.

PORTABLE TOILET BARRIER — **F**

LIMIT OF DISTURBANCE NOTES:

1. THE LIMITS OF DISTURBANCE (L.O.D.) TO BE FIELD MARKED.
2. FIELD VERIFICATION OF AN L.O.D. BY CITY ENGINEERING.
3. PRECONSTRUCTION EROSION AND SEDIMENT CONTROL MEETING REQUIRED PRIOR TO ANY DISTURBANCE. THE REQUIRED ATTENDEES WILL BE DEVELOPERS PROJECT MANAGER, CONSTRUCTION COMPANY'S ON SITE MANAGER.
4. MODIFICATION OF L.O.D. AS REQUIRED BY RESULTS OF PRECONSTRUCTION MEETING.
5. THE CONTRACTOR TO OBTAIN WRITTEN APPROVAL FROM THE CITY CERTIFYING THE L.O.D., DUST CONTROL, AND TREE PROTECTION HAS BEEN REVIEWED AND APPROVED PRIOR TO WORK BEGINNING

CONSTRUCTION PERIOD BEST MANAGEMENT PRACTICES NOTES:

1. CONTRACTOR WILL PERFORM EARTHWORK IN ACCORDANCE WITH THE CITY STANDARD SPECIFICATIONS, CITY EROSION, SEDIMENT, REVEGETATION REQUIREMENTS AND THE DUST CONTROL PLAN AS REQUIRED BY THE STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL DIVISION OF AIR QUALITY.
2. THE CONTRACTOR WILL PERFORM EARTHWORK IN ACCORDANCE WITH THE PROJECT EARTHWORK SPECIFICATIONS AND THE EARTHWORK RECOMMENDATIONS FOUND IN THE GEOTECHNICAL INVESTIGATION REPORT PREPARED FOR THIS PROJECT. IN THE EVENT THAT THERE IS A CONFLICT BETWEEN THE DOCUMENTS MENTIONED (NOTE 2) AND THE CITY'S EROSION AND SEDIMENT CONTROL REQUIREMENTS OR THE DUST CONTROL PLAN AS REQUIRED BY THE STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL DIVISION OF AIR QUALITY, THE CITY'S REQUIREMENTS AND THE STATE REQUIREMENTS WILL CONTROL.
3. L.O.D. BARRIERS WILL BE PROPERLY INSTALLED PRIOR TO ANY DISTURBANCE. L.O.D. BARRIERS ARE DEFINED AS SILT FENCE AND ENVIRONMENTAL FENCE.
4. INSTALL SILT FENCE ON ALL DOWNHILL SIDE OF L.O.D. SEE DETAIL AND SILT FENCE NOTES FOR CORRECT INSTALLATION PROCEDURE.
5. ENVIRONMENTAL FENCES ARE TO BE INSTALLED ON ALL UPHILL SIDE OF L.O.D.
6. THE L.O.D. SILT FENCE BARRIERS DO NOT REPLACE OR FUNCTION AS SEDIMENTATION B.M.P.S., ADDITIONAL SEDIMENT (BEST MANAGEMENT PRACTICES) BMPS WILL BE REQUIRED AS SHOWN ON THE PLANS OR AS REQUIRED BY THE CITY THROUGHOUT THE PROJECT AS UNFORESEEN SITUATIONS OCCUR.
7. WITHIN THE SAME WORKING DAY SOIL IS DISTURBED ALL SEDIMENT CONTROL B.M.P.S. WILL BE INSTALLED. AN EXAMPLE OF SEDIMENT CONTROL BMP IS A SILT FENCE OR A TEMPORARY SEDIMENTATION BASIN. EXISTING VEGETATION WILL NOT BE BURIED, THE METHOD OF DISPOSAL WILL BE SUBMITTED AND APPROVED BY THE CITY.
8. INSTALL ALL SEDIMENTATION BMPS AS SHOWN ON PLANS AND AS DIRECTED BY THE CITY
9. DUST CONTROL MEASURES WILL BE ON SITE AND IN WORKING ORDER WHEN SOIL IS DISTURBED. DUST CONTROL WILL BE USED 24 HOURS SEVEN DAYS PER WEEK UNTIL SOIL IS RESEEDED AND PROTECTED. WATER USED TO CONTROL DUST WILL CONTAIN CALCIUM CHLORIDE OR SIMILAR ADDITIVE. THE DUST CONTROL PLAN AS REQUIRED BY THE STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL DIVISION OF AIR QUALITY DOES NOT REPLACE THE CALCIUM CHLORIDE REQUIREMENT.
10. INSTALL IMPROVEMENTS AS SHOWN ON THE APPROVED CONSTRUCTION PLANS.
11. ALL DISTURBED SOIL WILL BE MADE STABLE AS WITHIN 21 DAYS OF DISTURBANCE.
12. TEMPORARY AND PERMANENT SEDIMENT BEST MANAGEMENT PRACTICES WILL REMAIN FUNCTIONAL AT ALL TIMES THROUGH THE ENTIRE PROJECT AND UNTIL ALL DISTURBED SOIL HAS BEEN STABILIZED TO PREVENT EROSION. WRITTEN APPROVAL MUST BE OBTAINED FROM THE CITY CERTIFYING ALL DISTURBED SOIL IS STABLE BEFORE ABANDONING SEDIMENTATION BEST MANAGEMENT PRACTICES.
13. IF THE EXISTING GRADES ARE DIFFERENT THAN WHAT IS SHOWN ON THE GRADING PLAN, STOP WORK AND NOTIFY THE CITY.
14. IF THE PROJECT REQUIRES EXPORT OR IMPORT MATERIAL TO ACHIEVE A BALANCED SITE. THE CONTRACTOR IS TO KEEP OFFSITE ROADS CLEAN AT ALL TIMES. FAILURE TO KEEP STREETS CLEAN WILL RESULT IN A MANDATORY WORK STOP ORDER BEING ISSUED ON THE IMPORT/ EXPORT OPERATION.
15. THE PROJECT CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL PAVED STREETS ADJACENT TO OR ABUTTING THE GRADING PROJECT CLEAN AND FREE OF DIRT, MUD, AND DEBRIS AT ALL TIMES. WHEREAS THIS IS A PUBLIC HEALTH AND SAFETY ISSUE. FAILURE TO COMPLY WILL RESULT IN A MANDATORY WORK STOP ORDER BEING ISSUED OVER THE ENTIRE PROJECT, INCLUDING COMMERCIAL AND RESIDENTIAL CONSTRUCTION PROJECTS.
16. THE CONTRACTOR WILL PROVIDE ADDITIONAL TEMPORARY EROSION CONTROL PLANS, AND PERMITS AS REQUIRED BY THE CITY, THE COUNTY AND THE STATE OF UTAH AS REQUIRED THROUGHOUT THE DURATION OF THE PROJECT.
17. FAILURE TO FOLLOW THE SEQUENCE OF CONSTRUCTION SHALL RESULT IN THE ISSUANCE OF A WORK STOP ORDER BEING ISSUED.
18. CONCRETE TRUCKS TO USE PRE-ASSIGNED WASH OUT AREA. CONCRETE TRUCKS ARE NOT TO BE CLEANED OUT OR WASHED DOWN IN THE PUBLIC RIGHT-OF-WAY.
19. PORTABLE TOILETS TO BE LOCATED ADJACENT TO CONTRACTOR TRAILER. TOILETS SHALL BE MAINTAINED BY CONTRACTOR.
20. CONSTRUCTION WASTE BIN TO BE LOCATED NEAR CONTRACTOR TRAILER. ALL CONSTRUCTION WASTE TO BE PLACED IN WASTE BIN.
21. ALL CONSTRUCTION PERIOD BEST MANAGEMENT PRACTICES (BMPS) ARE TO BE INSPECTED AND MAINTAINED AT LEAST WEEKLY, ALSO BEFORE AND AFTER EACH STORM EVENT.
22. CONTRACTOR SHALL BE REQUIRED TO KEEP A RECORD OF ALL INSPECTIONS AND MAINTENANCE ON SITE WITH THE STORM WATER POLLUTION PREVENTION PLAN.

CONSTRUCTION PERIOD BEST MANAGEMENT PRACTICES

VCBO ARCHITECTURE

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VCBO NUMBER: 22785
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STATE OF UTAH — NICHOLE LEE LUTH — 8023335 — 11/08/23

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

EROSION CONTROL PLAN DETAILS

C510

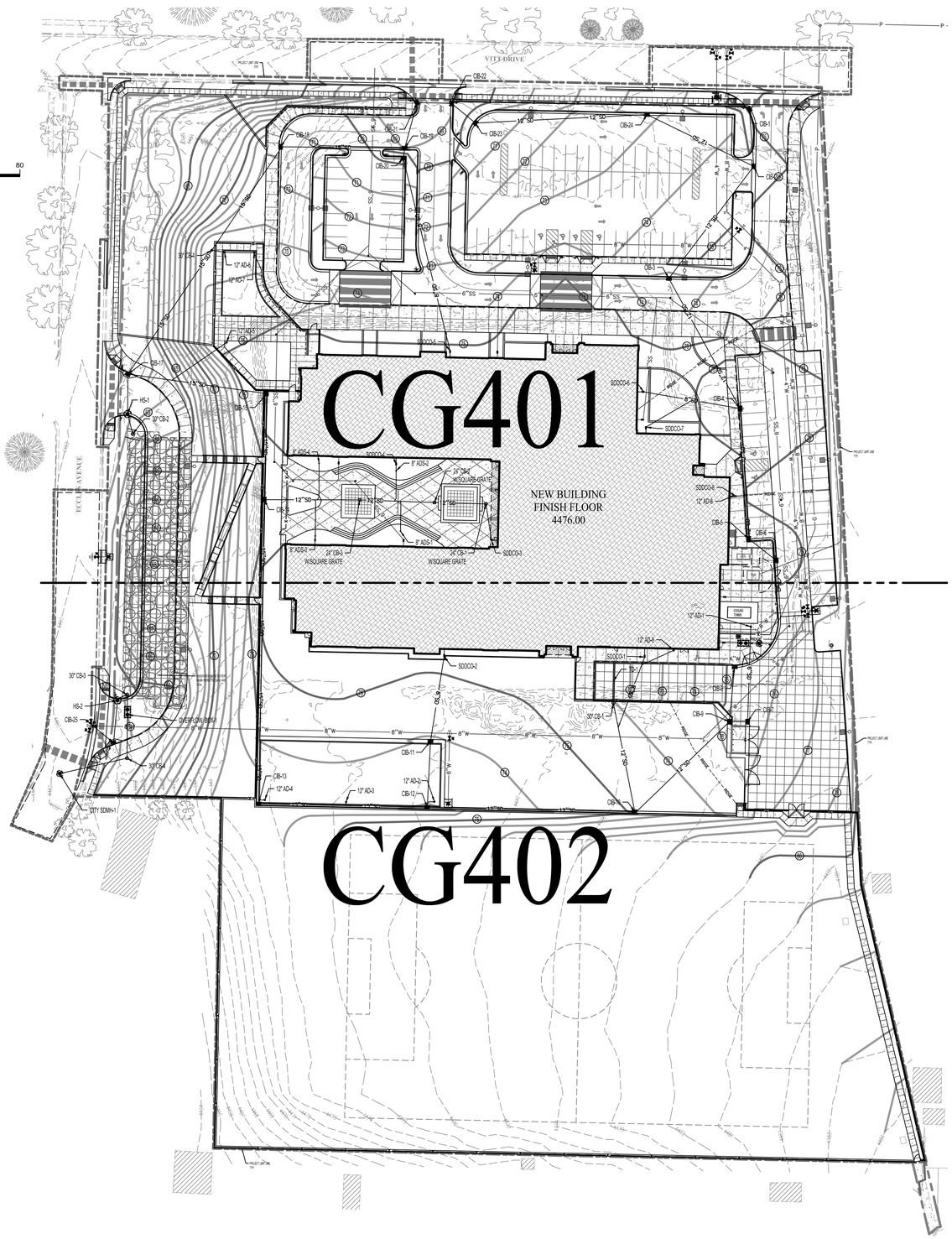
GENERAL GRADING NOTES:

1. CONTOURS OF THE SITE ARE BASED ON A SURVEY BY MERIDIAN ENGINEERING INC. REFER TO SHEET C200 FOR PROJECT BENCH MARK AND BASIS OF BEARING.
2. ALL WORK IN VITT DRIVE AND ECCLES AVENUE SHALL BE IN ACCORDANCE WITH APWA AND CITY OF OGDEN CITY STANDARD PLANS AND SPECIFICATIONS. NEW CURB AND GUTTER, PAVEMENT REPAIRS, AND THE NEW DRIVEWAYS SHALL COMPLY WITH THESE APWA AND CITY STANDARDS. TRAFFIC CONTROL FOR THE PROJECT SHALL ALSO BE APPROVED BY THE CITY WHERE THE SITE ACCESSES TO PUBLIC STREETS. COORDINATE WITH CITY FOR PAVEMENT CONSTRUCTION IN RIGHT OF WAY TO THE REQUIRED PAVEMENT THICKNESS FOR ALL STREET REPAIRS.
3. PROVIDE APPROVED SILT PROTECTION FOR ALL NEW AND EXISTING CATCH BASINS UNTIL LANDSCAPING IS WELL ESTABLISHED AND PARKING IS COMPLETE. THE PIPING SYSTEM SHALL BE CLEANED OUT BEFORE FINAL APPROVAL. USE MIRAFI "DANDY BAG" OR ANOTHER APPROVED EQUIVALENT FOR EXISTING INLET PROTECTION. REFER TO SHEET C500 AND C510.
4. DIMENSIONS OR COORDINATES ARE TO THE CENTER OF CATCH BASINS FOR AREA INLETS AND AT THE CENTER OF THE CATCH BASIN AT TBC FOR INLETS IN CURB AND GUTTER.
5. HANDICAP PARKING AREA SHALL NOT EXCEED 2% IN ANY DIRECTION. THE PERPENDICULAR CROSS SLOPE TO PARKING STALL IN OTHER AREAS OF THE PARKING LOT SHALL NOT EXCEED 4% IN SLOPE AND SLOPE SHALL NOT EXCEED 6% IN ANY DIRECTION FOR DRIVEWAYS.
6. ALL WALKWAYS SHALL NOT EXCEED 5% SLOPE. THE PERPENDICULAR CROSS SLOPE TO NOT EXCEED 2% MAX. SLOPE FOR WALKWAYS 2% MAX. FROM BUILDING OR STAIR RISERS FOR 5' MINIMUM. ALSO SLOPE 2% MAX FOR 5' AT THE END OF THE 1:12 SLOPE OF ALL H.C. RAMPS.
7. REFER TO SITE LAYOUT PLAN
8. PIPING LENGTHS ARE APPROXIMATE LENGTHS AND ARE ROUNDED TO THE NEAREST FOOT. LENGTHS ARE FROM CENTER TO CENTER OF INLETS OR CLEANOUTS. PIPE SLOPES ARE ALSO APPROXIMATE. USE INVERTS AT EACH BOX FOR CONTROL OF PIPE INSTALLATION.
9. "TBC" IS TOP BACK OF CURB ELEVATIONS. "FS" IS FINISH SURFACE ELEVATIONS. "TOC" IS TOP OF CONCRETE ELEVATIONS. "TOW" IS TOP OF WALL ELEVATIONS. "BOT" IS FINISH SURFACE AT BOTTOM OF WALL ELEVATIONS. "FL" IS FLOW LINE.
10. TRANSITION FACE OF CURB TO BE FLUSH TO ADJACENT FINISHED SURFACE WHERE INDICATED BY "TBCFS" TO FULL HEIGHT OVER 5' (MIN).
11. PLACE CONCRETE COLLAR AROUND ALL NEW CATCH BASINS OR CLEANOUTS (NOT IN CURB AND GUTTER). COLLAR TO BE 1' MINIMUM WIDTH AND SHALL BE 8" MINIMUM THICKNESS. PLACE 2 #4 BARS AROUND OPENING. SEE DETAIL ON SHEET C100.
12. ALL LANDSCAPE AREAS SHALL HAVE 4" MINIMUM OF TOPSOIL OR AS REQUIRED BY LANDSCAPE PLANS. LANDSCAPE AREAS TO BE GRADED TO DRAIN AND MOUND WHERE INDICATED ON LANDSCAPE PLANS.
13. REFER TO SHEET C100 AND C210 FOR REQUIRED PAVEMENT SECTIONS.
14. ALL STORM WATER TO BE DETAINED ONSITE FOR THE 25-YEAR STORM EVENT PER OGDEN CITY STANDARDS.
15. IF MORE THAN 3 FEET OF GRADING FILL WILL BE PLACED ABOVE THE EXISTING SURFACE (TO RAISE SITE GRADES), CMT TECHNICAL SERVICIES, THE OWNERS GEOTECHNICAL ENGINEER, SHOULD BE NOTIFIED SO THAT THEY MAY ASSESS POTENTIAL SETTLEMENT AND MAKE ADDITIONAL RECOMMENDATIONS IF NEEDED.
16. DO NOT DRIVE HEAVY EQUIPMENT OR TRUCKS OVER EXCAVATED SUBGRADE. SOFT AREAS CAUSED BY ROUTING HEAVY EQUIPMENT OR TRUCKS OVER SUBGRADE WILL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. REPAIRS TO BE COMPLETED AS OUTLINED IN THE SPEC SECTION WITH UP TO 2 OF IMPORTED STRUCTURAL GRANULAR FILL TO STABILIZE SOFT AREAS CAUSED BY ROUTING HEAVY EQUIPMENT OR TRUCKS OVER EXCAVATED SUBGRADE.
17. SITE SOILS MAY NOT SUPPORT CONSTRUCTION TRAFFIC DURING WET PERIODS OF THE YEAR. CONTRACTOR WILL BE RESPONSIBLE TO PLACE GRANULAR FILL AND/OR COBBLE MATERIALS AS NECESSARY TO MAINTAIN ACCESS TO THE SITE OR BUILDING THROUGHOUT THE CONSTRUCTION SITE AT ALL TIMES. EXCESS MATERIAL SHALL BE REMOVED AS REQUIRED TO COMPLETE THE SITE TO THE GRADES SHOWN ON GRADING PLANS. ALSO REFER TO GEOTECHNICAL INVESTIGATION SHEETS FOR SITE SOIL PREPARATION REQUIREMENTS.
18. PROVIDE TEMPORARY STORM DRAIN PUMPING, PONDING, BERMING, PIPING AND INLETS OR OTHER MEASURES TO RETAIN CONSTRUCTION STORM DRAIN RUNOFF ON SITE DURING CONSTRUCTION UNTIL THE NEW SYSTEM IS OPERATIONAL. ALL CONSTRUCTION SITE RUNOFF TO HAVE HEAVY SEDIMENT REMOVED PRIOR TO RELEASING TO EXISTING SITE DRAIN SYSTEM. PROTECT ADJACENT BUILDING FROM CONSTRUCTION RUNOFF AT ALL TIMES.
19. THERE SHOULD BE NO STANDING WATER ONSITE. ALL STORM WATER SHALL DRAIN TO AN INLET OR AREA DRAIN. CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD IF ANY LOW SPOTS THAT DO NOT DRAIN ARE ENCOUNTERED. A WATER TEST WILL BE PERFORMED BY THE CONTRACTOR WITH THE ENGINEER OF RECORD IN ATTENDANCE OR A SURVEY OF THE NEW IMPROVEMENTS PROVIDED TO THE ENGINEER AT COMPLETION OF THE PROJECT TO VERIFY THAT ALL STORM DRAIN WATER DRAINS AS DESIGNED.
20. ALL "MATCH" LOCATIONS INDICATE THAT THE CONTRACTOR IS TO MATCH THE EXISTING GRADE. AN APPROXIMATE ESTIMATE IS PROVIDED BY THE ENGINEER BASED ON AN INTERPOLATION OF NEAREST SPOT ELEVATIONS PROVIDED BY THE SURVEY. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THESE ELEVATIONS. IF THE ELEVATION PROVIDED BY THE ENGINEER VARIES GREATLY FROM THE ACTUAL ELEVATION FOUND BY THE CONTRACTOR THE CONTRACTOR IS TO NOTIFY THE ENGINEER SO THAT THE ENGINEER CAN PROVIDE FURTHER DIRECTION.
21. GRADE UNIFORMLY BETWEEN SPOT ELEVATIONS AND CONTOURS UNLESS NOTED OTHERWISE. IF ANY QUESTIONS ARISE ABOUT THE PROPOSED GRADING SHOWN ON PLANS CONTACT THE ENGINEER OF RECORD BEFORE FIELD GRADING.
22. MAINTAIN DRAINAGE FROM ALL EXISTING ROOF DRAINS DURING CONSTRUCTION OF ALL PHASES. PROVIDE TEMPORARY MEASURES OF NEW PIPING, PUMPING, OR OTHER METHODS TO MAINTAIN DRAINAGE FROM ALL EXISTING ROOF DRAIN WHILE NEW PIPING SYSTEMS OUTFALLS ARE COMPLETED.
23. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL STUDY REFERENCED IN PLAN SET. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED SOILS ENGINEER, REGISTERED WITHIN THE STATE WHERE THE WORK IS BEING PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOIL REPORT.
24. CONTRACTOR IS TO BE AWARE OF WHAT WAS ALREADY INSTALLED OR UNDER CONSTRUCTION IN PACKAGE 1 AND TO FACILITATE ANY COORDINATION BETWEEN THE BINDING AND CONSTRUCTION OF THE TWO PACKAGES. ITEMS PREVIOUSLY COMPLETED IN PACKAGE 1 ARE TO BE PROTECTED IN PLACE DURING CONSTRUCTION OF PACKAGE 2. THIS INCLUDED ALL MASS EXCAVATION AND ROUGH GRADING.
25. ADS INJECTION MOLDED 45° REDUCER WYE (OR APP EQUIVALENT) FLOWABLE FILL TO BE PLACED AROUND EACH WYE CONNECTION. TYP.
26. NO STORM WATER TO ENTER THE RETENTION BASIN UNTIL THE PIPING SYSTEM AND PRE-TREATMENT INLET HAS BEEN INSTALLED. CONTRACTOR TO CLEAN ENTIRE SYSTEM BEFORE IT IS ATTACHED TO THE RETENTION BASIN.
27. NOTIFY ENGINEER OF RECORD IF THERE ARE ANY CONFLICTS WITH UTILITY LINES OR IF ASSUMED INVERTS VARY. FOR FURTHER COORDINATION. SEWER AND WATERLINES TO HAVE 18" SEPARATION WITH WATER OVER SEWER. ALL OTHER UTILITIES TO HAVE 12" SEPARATION MIN. IF 12" SEPARATION CANNOT BE ACHIEVED UTILITIES TO HAVE FLOWABLE FILL BETWEEN THE UTILITY LINES 5' EACH WAY.
28. CONTRACTOR IS RESPONSIBLE TO INFORM THE ENGINEER OF RECORD IF THE GRADES SHOWN ON THE SURVEY DO NOT MEET THE ACTUAL GRADES IN THE FIELD.
29. ALL STRUCTURE LIDS WITHIN THE PROJECT LIMITS WILL NEED TO HAVE THEIR GRADE ADJUSTED. WATER VALVES, SEWER MANHOLES, STORM DRAIN INLETS OR CLEANOUT BOXES, AND OTHER SURFACE UTILITY ACCESSORIES SHALL BE RAISED AND SLOPED TO ACCURATE FINISH SURFACE BY A CONCRETE GRADE COLLAR IN PAVEMENT. COLLAR SHALL BE 12" WIDE AROUND THE UTILITY APPARATUSES AND 8" MINIMUM THICKNESS. PLACE 2 #4 REBAR HOOPS IN COLLAR. CONCRETE COLLARS TO BE USED ONLY IN ASPHALT/CONCRETE/AND GRASS PAVER AREAS.
30. REFER TO LANDSCAPE PLANS FOR ALL INFORMATION ABOUT EXISTING AND PROPOSED TREES.
31. REMOVE AND REPLACE ANY DAMAGED CURB, GUTTER, OR SIDEWALK ALONG FRONTAGE BEFORE FINAL INSPECTION.
32. ALL GUTTERS TO SLOPE 0.5% MINIMUM TOWARDS CURB INLET BOX. CONTRACTOR TO NOTIFY ENGINEER OF RECORD IF THE PROPOSED GRADE DOES NOT MEET 0.50% SLOPE IN GUTTER.
33. SITE WALLS (EXCEPT STAR CHEEK WALLS OR SEAT WALLS) TO HAVE A 3" PERFORATED DRAIN (PVC OR HDPE WRAPPED IN DRAINAGE FABRIC) AS SHOWN ON PLANS AND ON THE RETAINING WALL DETAILS ON THE STRUCTURAL PLANS. CONNECT TO SITE DRAINAGE STRUCTURES AS SHOWN WITH 4" PVC SOLID PIPE (SDR 35) FROM THE CONNECTION AT THE PERFORATED FOOTING DRAIN TO THE STORM DRAIN STRUCTURE. SLEEVE DRAIN PIPE THROUGH SITE WALLS AS REQUIRED TO CONNECT TO DRAINAGE SYSTEM. WHERE FOOTINGS STEP DOWN BELOW NORMAL DEPTH FOR UTILITY CROSSING, PERFORATED DRAIN PIPE DOES NOT STEP DOWN TO AVOID ANY LOW POINTS IN THE WALL DRAIN PIPING.
34. SPOT ELEVATION PREFIX OF 44 HAS BEEN DROPPED FROM THE ELEVATIONS IE: ELEVATION 00.00 = 4400.00 AND 96.50 = 4496.50.

THE CONTRACTOR TO SCHEDULE THE ENGINEER OF RECORD IN WRITING 3 DAYS MINIMUM BEFORE PLACEMENT OF CONCRETE CURBING, FLATWORK, OR ASPHALT PAVING. ALL AREAS MUST BE FORMED AND HAVE COMPACTED BASE COURSE IN PLACE FOR THE ENGINEER TO COMPLETE A RANDOM SPOT GRADE CHECK BEFORE ASPHALT AND CONCRETE CONSTRUCTION. THE RANDOM GRADE CHECKS ARE FOR GENERAL CONFORMANCE TO SLOPES AND GRADING SHOWN ON PLANS USING A SMART LEVEL. RANDOM CHECKS DO NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GRADING IS IN CONFORMANCE WITH PLANS AND SPECIFICATIONS AND SATISFY PERFORMANCE OF HIS WORK. WITHIN 2 DAYS OF THE RANDOM SPOT CHECK, RESULTS OF THE SPOT CHECKS AND AREAS OF NON COMPLIANCE WILL BE PROVIDED TO THE CONTRACTOR AND ARCHITECT.

GRADING LEGEND

- 100 — MAJOR CONTOUR
- 99 — MINOR CONTOUR



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CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH
NICHOLE LEE LUTH
8023335
11/08/23

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

OVERALL GRADING PLAN

CG400

MERIDIAN ENGINEERING 25 YEARS OF EXCELLENCE

Blue Stakes of UTAH 811 Utah811.org

VITT DRIVE

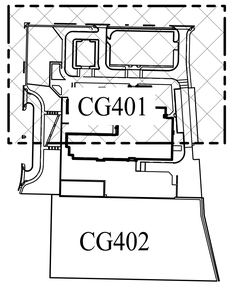
ECCLES AVENUE

NEW BUILDING
FINISH FLOOR
4476.00

REFER TO SHEET CG401

ENLARGED GRADING NOTES:

1. REFER TO NOTES ON SHEET CG400.



KEYMAP

SCALE 1"=20'

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1	11-16-2023	ADD#1

OSD HILLCREST ELEMENTARY REBUILD

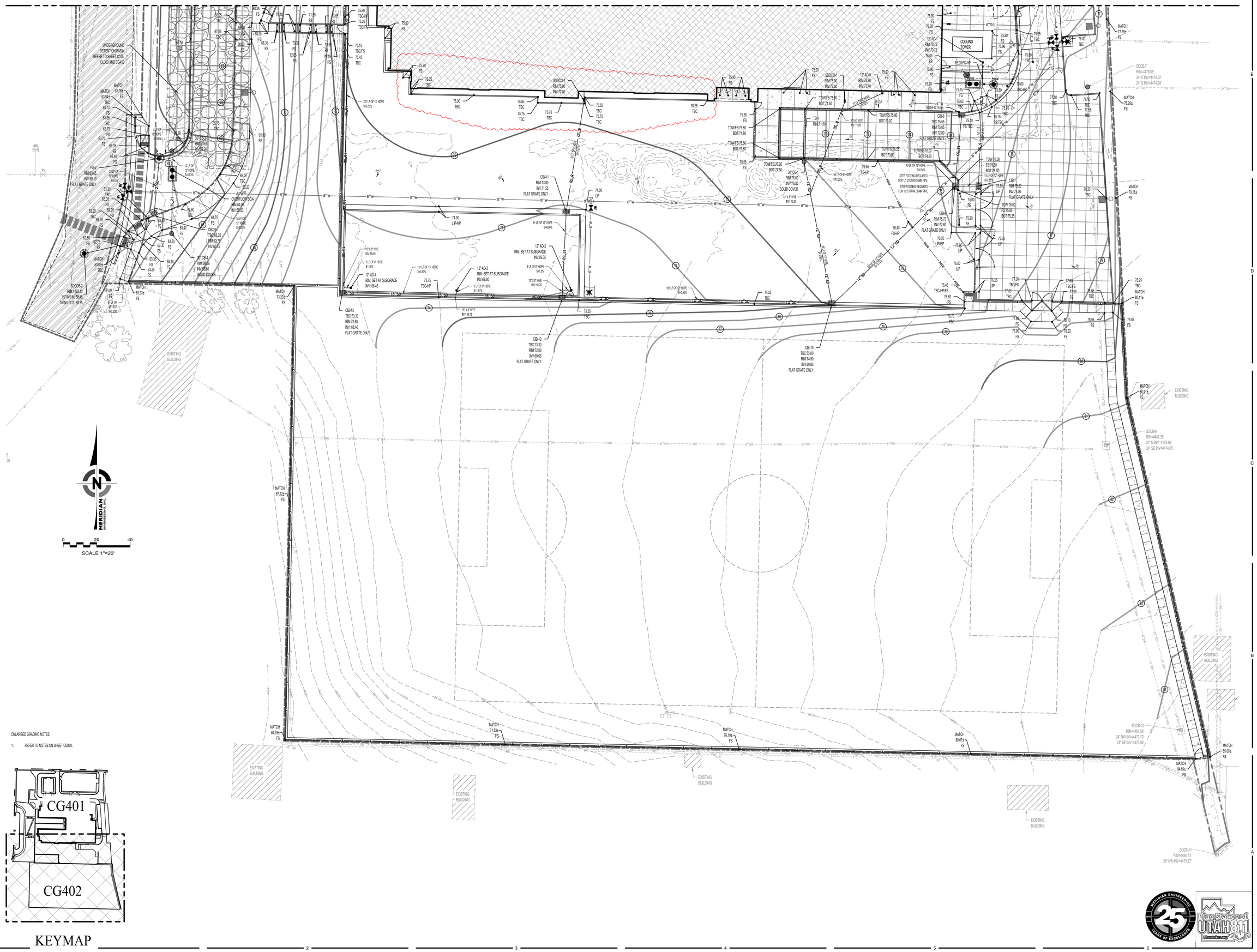
130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

ENLARGED GRADING PLAN

CG401

REFER TO SHEET CG402



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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

ENLARGED GRADING PLAN

CG402

NOTES:

1. SEDIMENT WILL NOT BE ALLOWED INTO RETENTION BASIN DURING CONSTRUCTION AND DURING LANDSCAPE STABILIZATION OF SOILS. CONTRACTOR WILL BE REQUIRED TO CLEAN OR REPLACE RETENTION BASINS THAT ARE NOT MAINTAINED FREE OF SEDIMENT DURING CONSTRUCTION AND DURING ESTABLISHMENT OF ALL LANDSCAPED AREAS.

2. APPROXIMATED A 25 YEAR STORM EVENT IS TO BE DETAINED UNDERGROUND IN AREAS SHOWN IN THE PLANS BELOW.

HYDROLOGY LEGEND

HIGH WATER LINE

SITE DEVELOPMENT DRAINAGE CALCULATIONS

Date: 18-Oct-23

Drainage calculations for : Hillcrest ES

BASIN A

Location: Ogden, UT

Allowable Release Rate

Total Area	**10.28 Ac.**	**447,812**	**SF**
Allowable Release Rate	**1.028 cfs**	**0.1 cfs/ac**	***City Connection***

		Runoff Coefficients
Landscape Area	220,664 SF	C= 0.15
Paved Area	165,617 SF	C= 0.9
Building Area	61,530 SF	C= 0.85
Others:	SF	C= 0.15
TOTAL AREA	447812 SF	Weighted C 0.52

Lapsed Time Minutes	Accum. Rainfall Inches (25 yr)	"CA" Acre	Total Runoff Vol. CF	Discharge CF	Req'd Storage CF
15	0.79	5.38	15327	925	14402
30	1.07	5.38	20733	1850	18882
60	1.32	5.38	25577	3701	21876
120	1.52	5.38	29452	7402	22050
180	1.58	5.38	30615	11103	19512
360	1.93	5.38	37397	22206	15191
720	2.47	5.38	47860	44411	3449
1440	3.04	5.38	58905	88822	0
REQUIRED DETENTION STORAGE:			**22,050 CF**		**25 yr Event**

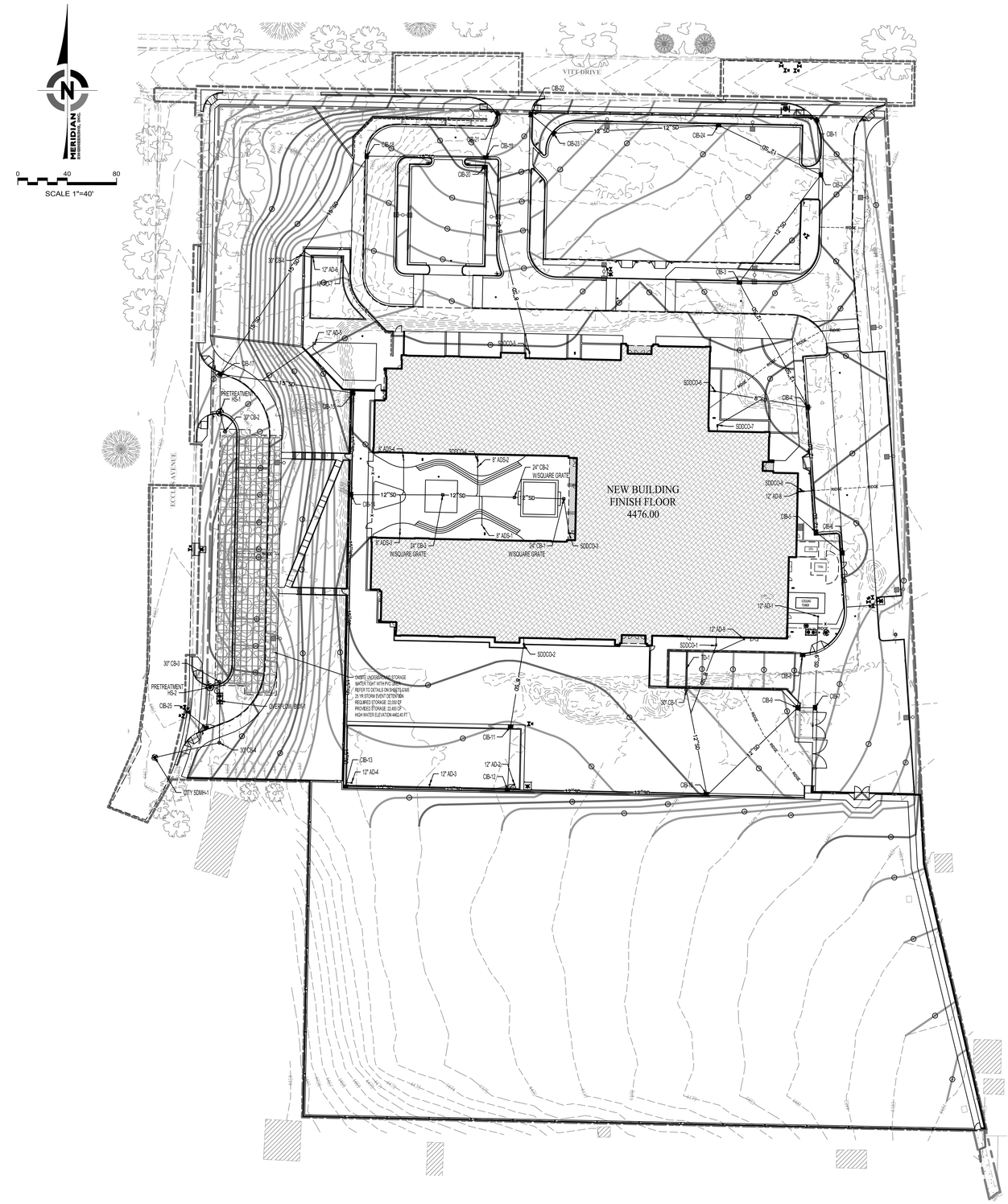
Lapsed Time Minutes	Accum. Rainfall Inches (100 yr)	"CA" Acre	Total Runoff Vol. CF	Discharge CF	Req'd Storage CF
15	1.18	5.38	22864	925	21939
30	1.60	5.38	31002	1850	29152
60	1.98	5.38	38365	3701	34665
120	2.21	5.38	42822	7402	35420
180	2.27	5.38	43985	11103	32882
360	2.50	5.38	48441	22206	26236
720	3.16	5.38	61230	44411	16819
1440	3.72	5.38	72081	88822	0
			35,420 CF		**100 yr Event**
PROVIDED DETENTION STORAGE:			**22,450 CF**		

Orifice Calculation

Area:	10.28 Acre
Discharge Rate	0.1 cfs/acre
Qp =	1.03 cfs
H =	3.6 ft
A =	0.1125 Sq Ft
	16.2 Sq In
D =	**4 4/8 In**
SQUARE=	**4.03 In**

USE A 4.05" x 4.05" SQUARE ORIFICE

Page 1



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8023335

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

HYDROLOGY PLAN

CG450

NOTES:

1. SITE EXCAVATION MATERIALS ARE NOT ALLOWED FOR USE BELOW FOOTING, BUILDING SLAB, OR OTHER STRUCTURAL ITEMS ON SITE (REFER TO SPECIFICATIONS.) SITE EXCAVATION MATERIALS CAN BE USED UNDER PAVEMENTS IF THEY MEET THE PROJECT SPECIFICATIONS AND REQUIREMENTS FROM THE GEOTECHNICAL REPORT. THE FILL MATERIAL SHOWN ON THE CALCULATIONS INCLUDED ALL NECESSARY FILL (INCLUSIVE OF PAVEMENT, CONCRETE, BASE COURSE, AND IMPORTED STRUCTURAL FILL.) TO BRING THE SITE TO THE FINISH SURFACE SHOWN ON THE GRADING PLANS. ADDITIONAL EXCAVATION IS REQUIRED IN CUT AREAS TO EXCAVATE TO THE NECESSARY SUBGRADE ELEVATIONS FOR THE NEW PAVEMENT.
2. ANY TOP SOIL ON THE SITE IS ASSUMED TO BE REMOVED AND REUSED AT THE TOP OF THE GRASS PLAY FIELD, AND OTHER LANDSCAPE AREAS AS INDICATED ON THE LANDSCAPE PLANS. CONTRACTOR SHALL STRIP THE TOP OF MATERIAL AS OUTLINED IN THE SPECIFICATIONS AND LANDSCAPE PLAN PRIOR TO ANY EXCAVATIONS OR BACKFILLING. SCREEN ALL TOPSOIL IN ACCORDANCE WITH LANDSCAPING SPECIFICATIONS PRIOR TO FINAL PLACEMENT OF THE MATERIAL.
3. THE MASS GRADING QUANTITIES ARE CALCULATED TO THE FINISH FLOOR OF THE BUILDING. ALL OTHERS AREAS ARE ALSO CALCULATED TO THE FINISH SURFACE SHOWN ON THE GRADING PLAN INCLUDING PAVEMENT AND TOPSOIL.
4. EXCAVATION FOR BUILDING FOOTINGS, UTILITY TRENCHES, SITE RETAINING WALLS, AND PAVEMENT/SIDEWALK SECTIONS OR OTHER MISCELLANEOUS STRUCTURES ARE NOT INCLUDED IN THE APPROXIMATED MASS GRADING QUANTITIES UNDER ALL SITE PAVEMENT.
5. SEE ATHLETIC ELEMENTS, LANDSCAPE, SPRINKLING AND FENCING PLANS FOR FURTHER INFORMATION AND LOCATIONS OF CONCRETE WORK INCLUDING LARGE SITE SIGNS (MONUMENT, AND VICTORY BELL), VARIOUS MOW STRIPS, COLLARS AND SLABS, ETC.
6. SEE THE FENCING PLANS FOR FURTHER INFORMATION ON BLOCK WALLS, FENCING TYPES, LOCATIONS, GATES, ETC.

LEGEND

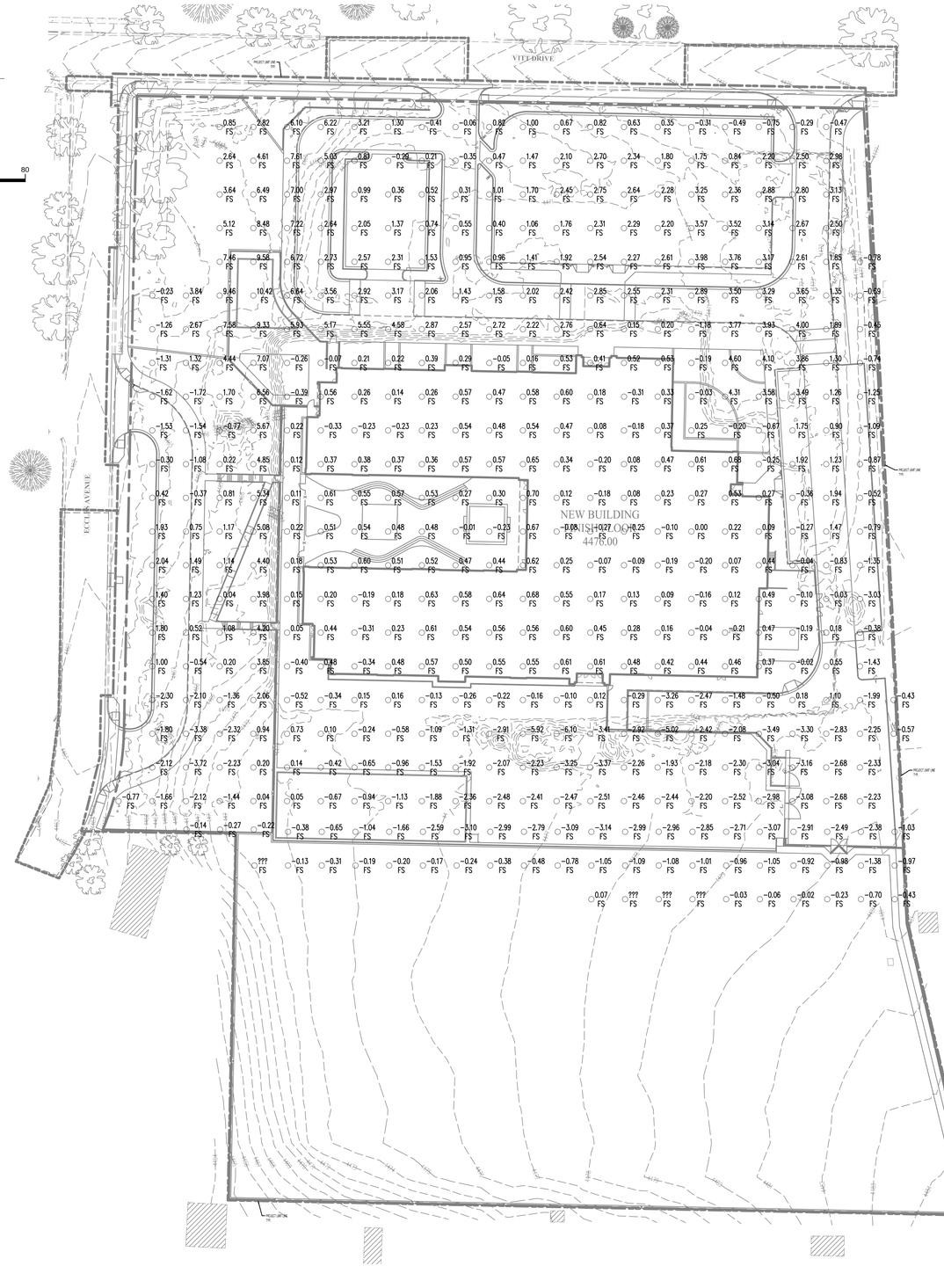
1.6	APPROXIMATE FILL TO GRADE (SEE NOTE 3)
-1.6	APPROXIMATE CUT TO GRADE (SEE NOTE 3)

CONTRACTOR BID NOTE:

THESE QUANTITIES ARE PREPARED TO HELP IN THE PREPARATION OF THE GRADING PLAN TO MINIMIZE THE REMOVAL OF MATERIAL FROM THE SITE AND TO APPROXIMATE THE AMOUNT OF MASS GRADING THAT WILL BE NECESSARY TO COMPLETE THE WORK. THE CONTRACTOR WILL NEED TO COMPLETE THEIR OWN EARTHWORK TAKE OFF BASED ON THE GRADING PLANS. THE ACTUAL QUANTITIES OF EARTHWORK MAY VARY FROM THE AMOUNTS SHOWN ON THIS SHEET. THE CONTRACTOR'S BID WILL INCLUDE ALL NECESSARY EARTHWORK TO COMPLETE THE PROJECT TO THE FINISH GRADES SHOWN ON THE GRADING PLANS.

MERIDIAN ENGINEERING, INC.

0 40 80
SCALE 1"=40'



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BID SET 5 - GENERAL CONSTRUCTION

CUT FILL PLAN

CG460

UTILITY DEMOLITION NOTES

1. REMOVE UTILITIES ONLY AFTER NEW TEMPORARY UTILITY LINES HAVE BEEN REROUTED AND CONNECTED AS REQUIRED.

2. REFER TO THE ELECTRICAL OR MECHANICAL PLANS FOR SITE DEMOLITION OF EXISTING TRANSFORMERS, ELECTRICAL LINES, EXISTING LIGHTING, ELECTRICAL EQUIPMENT, HEATING VAULTS, HEATING LINES, GAS LINES, OR OTHER SITE DEMOLITION INSIDE OR OUTSIDE THE PROJECT LIMITS.

3. ALL EXISTING UTILITIES OR SURFACE IMPROVEMENTS SHALL BE RETAINED AND PROTECTED DURING CONSTRUCTION, UNLESS NOTED OTHERWISE. ANY DAMAGE TO THE UTILITIES OR SURFACE IMPROVEMENTS SHALL BE REPAIRED WITH NEW MATERIALS AT NO ADDITIONAL COST TO THE OWNER. ALL INTERRUPTIONS OF UTILITIES SERVICE WILL BE COORDINATED WITH THE OWNER AT LEAST ONE WEEK IN ADVANCE. NIGHTTIME INTERRUPTIONS OF A SERVICE MAY BE NECESSARY TO SUCCESSFULLY COMPLETE NEW UTILITY CONNECTIONS.

4. UTILITIES ABANDONED IN PLACE UNDER PAVEMENT OR CONCRETE IMPROVEMENTS SHALL HAVE SAND BLOWN INTO THE ABANDONED PIPING. ALL OPEN ENDS OF ABANDONED PIPING SHALL BE PLUGGED AND CAPPED. REPAIR EXISTING MANHOLES AND INLETS WHERE PIPING IS REMOVED AS PART OF THE DEMOLITION. PLUG AND GROUT (EPOXY GROUT) HOLES IN THE EXISTING STRUCTURES. CORE DRILL AND EPOXY GROUT ALL NEW PIPING INTO EXISTING CONCRETE STRUCTURES.

5. BACKFILL ALL EXCAVATIONS FOR UTILITY PIPING OR STRUCTURE REMOVAL (MANHOLES, INLETS, ETC.) WITH STRUCTURAL FILL TO THE ROUGH GRADE ELEVATION SHOWN ON GRADING PLANS.

6. PROVIDE TEMPORARY STORM DRAINAGE PUMPING OR OTHER APPROVED STORM DRAIN DISPOSAL METHOD TO MAINTAIN DRAINAGE TO THE SITE DURING CONSTRUCTION.

7. MAINTAIN UTILITY SERVICE TO THE EXISTING BUILDING AT ALL TIMES UNLESS OTHERWISE COORDINATED.

8. ALL WORK WITHIN STREET ROW SHALL BE PER APWA STANDARD PLANS AND SPECIFICATIONS (2017 EDITION) AND CITY STANDARDS. OBTAIN CITY PERMIT PRIOR TO ANY WORK WITHIN CITY RIGHT OF WAY.

9. DO NOT DRIVE HEAVY EQUIPMENT OR TRUCKS OVER EXCAVATED SUBGRADE. SUBGRADE SOFT AREAS CAUSED BY ROUTING HEAVY EQUIPMENT OR TRUCKS OVER SUBGRADE WILL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. REPAIRS TO BE COMPLETED AS OUTLINED IN SPEC SECTION WITH UP TO 2' OF IMPORTED STRUCTURAL GRANULAR FILL TO STABILIZE SOFT AREAS CAUSED BY ROUTING HEAVY EQUIPMENT OVER EXCAVATED SUBGRADE.

10. POTHOLE AND FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION OF ANY NEW UTILITY OR CONNECTION TO EXISTING UTILITIES.

11. PROVIDE TEMPORARY WATER CONNECTION FOR MAINTAINING IRRIGATION OF LANDSCAPE THAT IS TO REMAIN. REFER TO LANDSCAPE PLANS.

12. RAISE/LOWER EXISTING VALVES, M.H., ELECTRICAL AND MECHANICAL VAULT HATCHES, AND UTILITY STRUCTURES WITHIN THE WORK AREA LIMITS TO NEW GRADES SHOWN ON GRADING PLAN.

SITE DEMOLITION PLAN NOTES:

1. COORDINATE ALL UTILITY INFORMATION WITH OWNER. THE COORDINATES SHOWN ON THE PLANS ARE BASED ON SURVEY CONTROL AND TOPOGRAPHIC SURVEY COMPLETED BY (INSERT). REFER TO EXISTING TOPOGRAPHIC PLAN FOR SURVEY CONTROL ON SHEET C200.

2. REFER TO SITE LAYOUT PLANS ON SHEET.

3. SIDEWALK REMOVAL AND REPLACEMENT TO BE AS INDICATED ON THE SITE PLAN AND WILL MATCH EXISTING SIDEWALK WIDTHS.

4. EXCAVATION ADJACENT TO TREES SHALL BE A MINIMUM OF 8' FROM THE CENTER OF THE TREE OR THE TREE DRIP LINE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. IF TREE ROOTS ARE ENCOUNTERED NEAR TREES TO REMAIN, COORDINATE TREE ROOT PRUNING WITH OWNER WHENEVER TREE ROOTS MAY BE ENCOUNTERED IN EXCAVATION. DO NOT COVER TREE ROOTS DAMAGED BY EXCAVATION NEAR TREE THAT ARE TO REMAIN. WHERE NECESSARY FOR EQUIPMENT OPERATION, TREE MAY BE TRIMMED. COORDINATE ANY TRIMMING OF TREES TO REMAIN WITHIN LANDSCAPE PLANS AND OWNER. HAND EXCAVATING FOR UTILITIES MAY BE NECESSARY TO KEEP TREES INDICATED TO BE PROTECTED IN PLACE.

5. ALL WORK WITHIN CITY ROAD ROW SHALL MEET CITY STANDARDS AND SPECIFICATIONS. OBTAIN CITY PERMIT PRIOR TO ANY WORK WITHIN CITY ROAD RIGHT OF WAY. OBTAIN ALL NECESSARY EXCAVATION PERMITS AND PROVIDE NECESSARY TRAFFIC CONTROL MEASURES PER CITY REQUIREMENTS.

6. REMOVE AND SALVAGE ALL SIGNS, BENCHES, AND EXTERIOR LIGHTS WITHIN THE PROJECT LIMITS. AFTER REMOVAL COORDINATE OWNER FOR PICKUP OF SIGNAGE OR OTHER SALVAGED ITEMS.

7. DO NOT DRIVE HEAVY EQUIPMENT OR TRUCKS OVER EXCAVATED SUBGRADE. DAMAGE TO SOFT SUBGRADE AREAS CAUSED BY ROUTING HEAVY EQUIPMENT OR TRUCKS OVER SUBGRADE WILL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. REPAIRS TO BE COMPLETED WITH UP TO 2' OF IMPORTED STRUCTURAL GRANULAR FILL TO STABILIZE SOFT AREAS.

8. PLACEMENT OF GRANULAR IMPORT MATERIALS MAY BE NECESSARY TO MAINTAIN CONSTRUCTION TRAFFIC PATHWAYS DURING WET PERIODS OF THE YEAR. CONTRACTOR IS REQUIRED TO MAINTAIN TRAFFIC PATHWAYS AT ALL TIMES DURING CONSTRUCTION AND REMOVE OR ADD TO THESE GRANULAR MATERIALS TO MEET THE GRADES NECESSARY TO OBTAIN THE GRADES SHOWN ON C400.

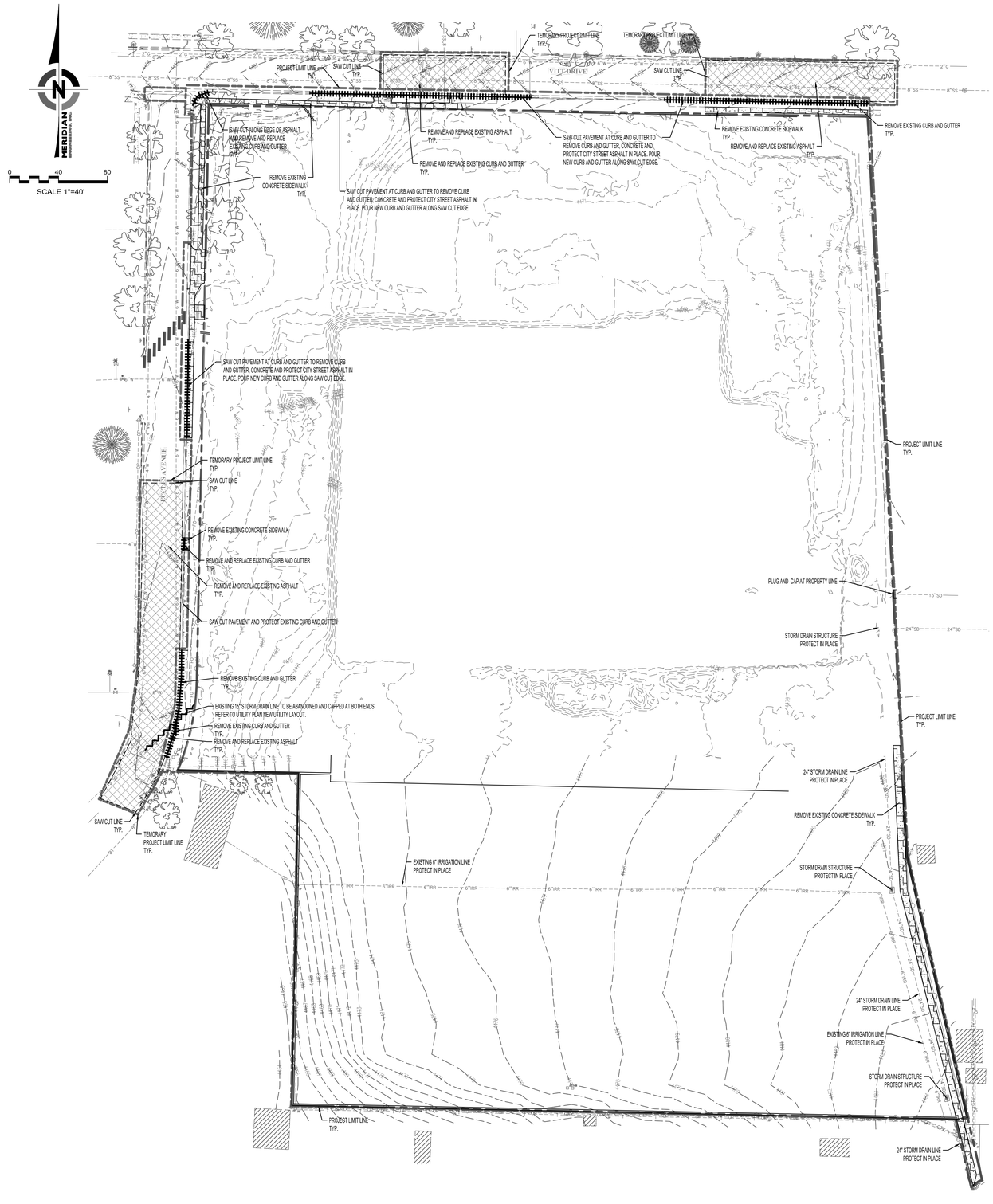
9. APPROXIMATE FOUNDATION EXCAVATION LIMIT LINE MAY BE EXTENDED WITH APPROVAL FROM THE OWNER. ANY AFFECTED IMPROVEMENTS IMPACTED SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. REFER TO BUILDING PLANS FOR APPLICABLE EXCAVATION LIMIT LINE FOR THE NEW BUILDING.

10. ALL STRIPING WITHIN THE PROJECT LIMIT LINE SHALL BE BLACKED OUT AND REPLACED WITH STRIPING PER SITE LAYOUT PLAN.

11. ALL SIGNS TO REMAIN UNLESS INDICATED ON THIS SHEET OR THE SITE PLAN.

DEMOLITION LEGEND

- REMOVE UTILITY STRUCTURES, LIGHTS ETC. — XX
- REMOVE TREES — X
- REMOVE UTILITY
- ABANDON UTILITY IN PLACE
- PLUG AND CAP
- SAWCUT
- REMOVE FENCING
- REMOVE WALL/CURBING/CURB AND GUTTER
- REMOVE EXISTING BUILDING
- REMOVE EXISTING ASPHALT
- REMOVE EXISTING CONCRETE
- PROJECT LIMIT LINE
- TEMPORARY PROJECT LIMIT LINE



VCBO ARCHITECTURE

SALT LAKE CITY, UT - HQ
ST. GEORGE, UT
LAIE, HI

524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.576.8800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH — NICHOLE LEE LOTHI — 8023335 — 11/08/23

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

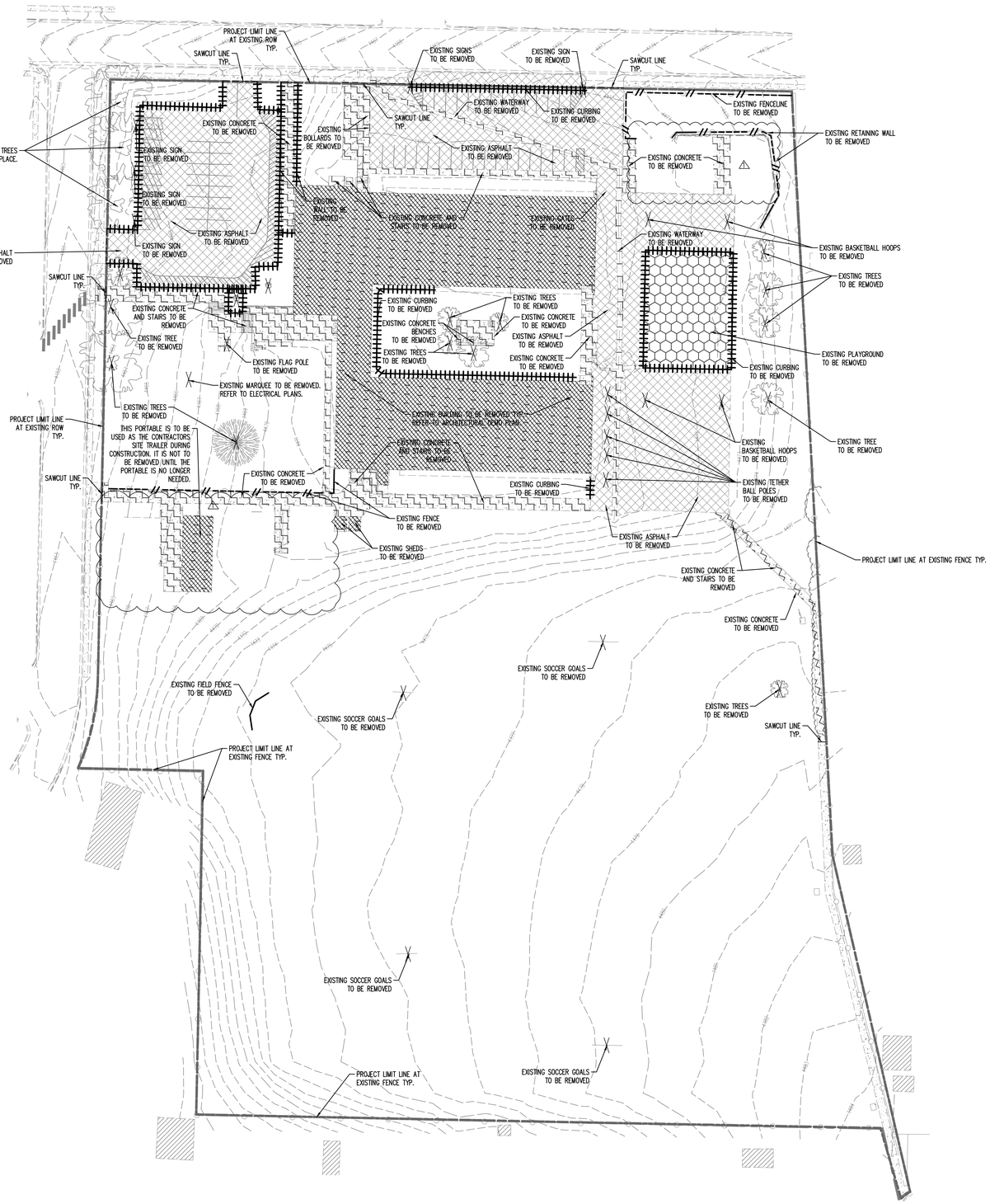
BID SET 5 - GENERAL CONSTRUCTION

OVERALL SITE AND UTILITY DEMOLITION PLAN

CS210

MERIDIAN ENGINEERING 25 YEARS OF EXCELLENCE

Blue Stakes of UTAH 811 — Utah811.org



DEMOLITION LEGEND

- REMOVE TREES
- SAWCUT
- REMOVE FENCING
- REMOVE WALL/CURBING/CURB AND GUTTER
- REMOVE EXISTING BUILDING
- REMOVE EXISTING ASPHALT
- REMOVE EXISTING CONCRETE
- REMOVE EXISTING PLAYGROUND
- PROJECT LIMIT LINE
- TEMPORARY PROJECT LIMIT LINE

SITE DEMOLITION PLAN NOTES:

1. COORDINATE ALL UTILITY INFORMATION WITH OWNER. THE COORDINATES SHOWN ON THE PLANS ARE BASED ON SURVEY CONTROL AND TOPOGRAPHIC SURVEY COMPLETED BY MERIDIAN ENGINEERING, INC. REFER TO EXISTING TOPOGRAPHIC PLAN FOR SURVEY CONTROL ON SHEET C200.
2. EXCAVATION ADJACENT TO TREES THAT ARE TO BE PROTECTED IN PLACE SHALL BE A MINIMUM OF 8' FROM THE CENTER OF THE TREE OR THE TREE DRIP LINE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. IF TREE ROOTS ARE ENCOUNTERED NEAR TREES TO REMAIN, COORDINATE TREE ROOT PRUNING WITH OWNER WHENEVER TREE ROOTS MAY BE ENCOUNTERED IN EXCAVATION. DO NOT COVER TREE ROOTS DAMAGED BY EXCAVATION NEAR TREE THAT ARE TO REMAIN. WHERE NECESSARY FOR EQUIPMENT OPERATION, TREE MAY BE TRIMMED. COORDINATE ANY TRIMMING OF TREES TO REMAIN WITHIN LANDSCAPE PLANS AND OWNER.
3. NO WORK TO BE DONE IN THIS BID PACKAGE WITHIN THE CITY ROW. SAWCUT ALL CONCRETE AND ASPHALT AT THE PROPERTY LINE.
4. REMOVE AND SALVAGE ALL SIGNS, BENCHES, AND EXTERIOR LIGHTS WITHIN THE PROJECT LIMITS. AFTER REMOVAL COORDINATE OWNER FOR PICKUP OF SIGNAGE OR OTHER SALVAGED ITEMS.
5. DO NOT DRIVE HEAVY EQUIPMENT OR TRUCKS OVER EXCAVATED SUBGRADE. DAMAGE TO SOFT SUBGRADE AREAS CAUSED BY ROUTING HEAVY EQUIPMENT OR TRUCKS OVER SUBGRADE WILL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. REPAIRS TO BE COMPLETED WITH UP TO 2' OF IMPORTED STRUCTURAL GRANULAR FILL TO STABILIZE SOFT AREAS.
6. PLACEMENT OF GRANULAR IMPORT MATERIALS MAY BE NECESSARY TO MAINTAIN CONSTRUCTION TRAFFIC PATHWAYS DURING WET PERIODS OF THE YEAR. CONTRACTOR IS REQUIRED TO MAINTAIN TRAFFIC PATHWAYS AT ALL TIMES DURING CONSTRUCTION AND REMOVE OR ADD TO THESE GRANULAR MATERIALS TO MEET THE GRADES NECESSARY TO OBTAIN THE GRADES SHOWN ON C400.
7. REFER TO BUILDING PLANS FOR APPLICABLE EXCAVATION LIMIT LINE FOR THE DEMOLITION OF THE EXISTING BUILDING AND BUILDING BASEMENT AND TUNNELS.
8. ALL SIGNS TO REMAIN OUTSIDE OF LIMIT LINE UNLESS INDICATED ON THIS SHEET.
9. ALL FENCING ALONG PROPERTY LINES TO REMAIN IN PLACE AS PART OF THIS BID PACKAGE UNLESS NOTES ON THIS PLAN. CONTRACTOR IS TO PROTECT IN PLACE.

VCBO ARCHITECTURE
524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.575.8800
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REV	DATE	DESCRIPTION
1	2023-05-23	ADD#1

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: MAY 15, 2023

OSD HILLCREST ELEMENTARY REPLACEMENT

OGDEN SCHOOL DISTRICT
130 N. ECCLES AVE., OGDEN, UT 84404
DEMOLITION - BID PACKAGE 1

SITE DEMOLITION PLAN

CS220

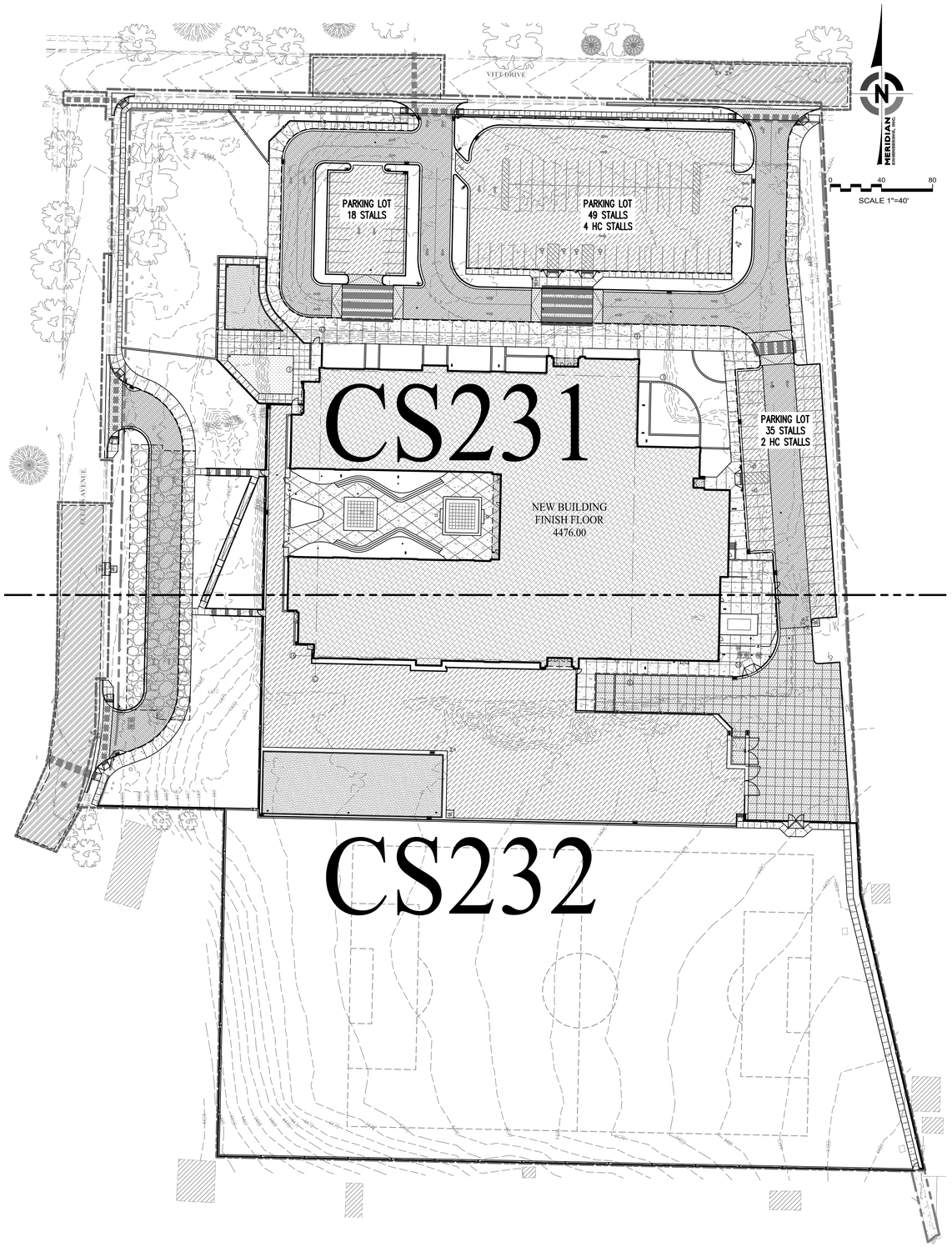
HATCH LEGEND

- VEHICULAR CONCRETE — PER DETAIL A ON SHEET C100
- MONOLITHIC SIDEWALK AND CURB — REFER TO DETAIL F ON SHEET C100
- NEW BUILDING
- NEW BUILDING OVERHANG
- ASPHALT PAVEMENT — SEE DETAIL B ON SHEET C100
- MONOLITHIC SIDEWALK AND CURB AND GUTTER — REFER TO DETAIL G ON SHEET C100
- NEW CITY ROW ASPHALT — REFER TO OGDEN CITY DETAIL RD-3 ON SHEET C103
- ARTIFICIAL TURF — REFER TO ARCHITECTURAL PLANS
- HEAVY DUTY ASPHALT PAVEMENT — SEE DETAIL C ON SHEET C100
- 3' WATERWAY — REFER TO DETAIL I ON SHEET C100
- UNDERGROUND DETENTION BASIN — REFER TO C105 AND CG450
- 6" CURB — SEE DETAIL D ON SHEET C100
- SIDEWALK — PER DETAIL K ON SHEET C100
- NEW SURFACE UTILITIES REFER TO CU500
- 24" CURB AND GUTTER — SEE DETAIL E ON SHEET C100
- PLAYGROUND SURFACE — REFER TO ARCHITECTURAL PLANS
- NEW RETAINING WALL — REFER TO STRUCTURAL PLANS

GENERAL SITE LAYOUT NOTES:

1. REFER TO ARCHITECTURAL SITE PLAN FOR DETAIL OF DUMPSTER ENCLOSURE.
2. REFER TO ELECTRICAL PLANS FOR TRANSFORMER LOCATIONS AND LIGHTING.
3. REFER TO LANDSCAPE PLANS FOR LAYOUT OF PLANTINGS.
4. VERIFY THE GRID DISTANCES SHOWN FOR BUILDING LOCATIONS WITH ARCH PLANS.
5. ALL PAVEMENT REPAIR TO MEET REQUIREMENT STANDARD DETAILS ON C100.
6. TRANSITION CURB FROM STANDARD CURB HEIGHT TO CURB TERMINATION OVER 6' MINIMUM AT ALL LOCATIONS.
7. REPAIR/CONSTRUCT DRIVE APPROACHES PER CITY STANDARDS.
8. CURVE AND LINE DATA IS BASED ON THE TOP BACK OF CURB AND FRONT OF SIDEWALK.

PARKING STALL COUNT	
TOTAL STALLS:	108
STALLS:	102
HC STALLS:	6



TBC Line Table		
L#	L	Bearing
L1	23.82	N69° 12' 51.21"E
L2	3.82	S3° 48' 00.00"E
L3	188.00	N1° 12' 00.00"E
L4	54.20	S3° 48' 00.00"E
L5	18.00	N66° 48' 51.21"W
L6	5.60	N1° 13' 54.11"E
L7	6.65	S1° 08' 40.25"W
L8	5.50	N88° 51' 19.75"W
L9	10.40	S1° 08' 40.25"W
L10	188.00	S1° 12' 00.00"W
L11	10.42	N1° 00' 34.66"E
L12	5.50	N88° 59' 25.34"W
L13	3.30	S60° 37' 26.18"W
L14	5.60	S0° 55' 20.79"W
L15	10.00	N1° 16' 39.49"E
L16	36.78	N1° 20' 22.35"E
L17	117.61	S89° 01' 09.54"E
L18	5.16	S88° 55' 52.89"E
L19	5.00	N1° 03' 21.20"E
L20	10.70	N88° 55' 52.89"W
L21	75.52	N88° 47' 59.18"W
L22	98.00	S1° 12' 00.82"W
L23	322.95	S88° 47' 59.18"E
L24	6.02	N88° 47' 59.18"W
L25	1.68	S3° 48' 00.00"E
L26	50.91	N1° 12' 00.00"E
L27	54.50	S3° 48' 00.00"E
L28	17.50	N86° 12' 00.00"E
L29	107.62	N88° 48' 00.00"W
L30	29.50	S1° 12' 00.00"W
L31	19.00	N88° 47' 59.18"W
L32	48.30	S43° 48' 00.00"E
L33	80.24	S1° 12' 00.82"W
L34	38.99	N88° 47' 59.18"W
L35	81.50	S3° 48' 00.00"E
L36	103.48	N1° 12' 00.00"E
L37	25.18	S88° 48' 00.00"E
L38	373.89	N88° 48' 00.00"W
L39	156.17	N1° 12' 00.00"E
L40	36.81	N88° 48' 00.00"W
L41	125.87	S3° 48' 00.00"E
L42	17.00	S86° 12' 00.00"W
L43	13.01	S62° 23' 24.78"W
L44	13.25	N59° 59' 24.78"W
L45	2.30	N1° 12' 00.00"E
L46	1.99	S1° 12' 00.00"W
L47	6.50	S3° 48' 00.00"E
L48	67.31	S4° 58' 07.65"E
L49	84.38	S1° 12' 00.82"W
L50	4.47	N76° 27' 46.67"E
L51	48.00	N1° 11' 59.74"E
L52	140.00	S88° 48' 00.26"E
L53	48.00	S1° 11' 59.74"W
L54	140.00	N88° 48' 00.26"W
L55	1.33	N88° 48' 00.26"W
L56	4.97	S46° 12' 00.00"W
L57	20.90	N72° 04' 51.59"W
L58	35.50	S43° 48' 03.22"E
L59	5.00	S1° 12' 00.00"W
L60	10.17	S1° 11' 59.74"W

TBC Line Table		
L#	L	Bearing
L61	17.00	S88° 47' 59.18"E
L62	20.76	N88° 47' 59.18"W
L63	79.00	N1° 12' 00.82"E
L64	69.50	S1° 12' 00.82"W
L65	17.00	N88° 47' 59.18"W
L66	63.49	S1° 12' 00.82"W
L67	2.00	S1° 12' 00.82"W
L68	182.00	S88° 47' 59.18"E
L69	15.50	S88° 47' 59.18"E
L70	82.00	S1° 12' 00.82"W
L71	15.50	N88° 47' 59.18"W
L72	35.47	S1° 12' 00.77"W
L73	22.50	S88° 47' 59.18"E
L74	15.50	N88° 47' 59.18"W
L75	82.00	N1° 12' 00.82"E
L76	15.50	S88° 47' 59.18"E
L77	2.00	N1° 12' 00.82"E
L78	9.50	S88° 47' 59.18"E
L79	49.47	S1° 12' 00.82"W
L80	108.50	N88° 47' 49.84"W
L81	18.00	N88° 47' 59.18"W
L82	63.50	N88° 47' 59.18"W
L83	65.63	N1° 12' 00.82"E
L84	10.86	N43° 47' 59.18"W
L85	5.61	S88° 58' 52.54"E
L86	5.00	S0° 59' 24.05"W
L87	6.65	N88° 58' 52.54"W
L88	21.46	S1° 12' 00.82"W
L89	9.30	N43° 47' 59.18"W
L90	2.59	S1° 12' 00.82"W
L91	182.79	N88° 47' 59.18"W
L92	30.02	N1° 12' 00.82"E
L93	2.00	S88° 47' 59.18"E
L94	10.10	N1° 12' 00.82"E
L95	12.27	N88° 58' 52.54"W
L96	5.00	N1° 00' 53.80"E
L97	6.26	N88° 58' 52.54"W
L98	85.44	N88° 59' 41.00"W
L99	58.07	N2° 50' 46.64"W
L100	218.52	N13° 40' 38.80"W
L101	51.37	N88° 48' 00.00"W
L102	17.00	S86° 12' 00.00"W
L103	30.10	N1° 12' 00.00"E
L104	17.00	S86° 12' 00.00"W
L105	26.27	S88° 48' 00.00"E
L106	11.95	N68° 48' 00.00"W
L107	24.46	N61° 12' 00.00"E
L108	20.97	N74° 06' 17.63"E
L109	33.32	S61° 48' 00.00"E
L110	4.73	S46° 12' 00.00"W
L111	4.97	N43° 48' 00.00"W
L112	11.01	S71° 12' 00.00"W
L113	24.07	S58° 48' 00.00"E
L114	77.33	S88° 48' 00.26"E
L115	32.92	N64° 12' 00.84"E
L116	4.73	N43° 48' 00.00"W
L117	29.00	N3° 48' 00.00"W
L118	19.83	S1° 12' 00.00"W
L119	17.00	N86° 12' 00.00"E
L120	199.00	N3° 48' 00.00"W

TBC Line Table		
L#	L	Bearing
L121	33.73	S88° 48' 00.00"E
L122	5.00	S1° 06' 45.57"W
L123	4.00	S1° 11' 59.74"W
L124	28.00	S88° 48' 00.26"E
L125	3.00	N1° 11' 59.74"E
L126	76.84	S88° 47' 58.05"E
L127	1.00	S1° 12' 00.00"W

TBC Curve Table					
C#	L	R	Δ	Chord Bearing	Chord L
C1	11.16	169.24	003°46'47"	S18° 48' 12"W	11.16
C2	5.12	24.00	012°13'51"	S34° 22' 16"W	5.11
C3	3.23	24.02	007°42'09"	N46° 35' 21"E	3.23
C4	22.71	26.41	049°16'45"	S86° 31' 09"W	22.02
C5	55.42	49.48	064°10'21"	N33° 16' 51"E	52.57
C6	55.42	49.48	064°10'21"	N30° 52' 51"W	52.57
C7	7.91	24.00	018°52'45"	N55° 32' 49"W	7.87
C8	15.04	24.00	035°53'19"	N16° 05' 46"W	14.79
C9	11.77	19.32	034°55'19"	S15° 55' 56"W	11.59
C10	7.43	16.00	026°35'14"	S77° 42' 55"W	7.36
C11	25.47	16.00	091°12'00"	S44° 24' 00"E	22.86
C12	11.58	34.50	019°14'17"	N81° 34' 52"E	11.53
C13	25.13	16.00	090°00'00"	S46° 12' 00"W	22.63
C14	7.51	16.00	026°53'16"	S75° 43' 39"E	7.44
C15	11.77	19.32	034°55'19"	S13° 46' 41"E	11.59
C16	9.72	15.00	037°07'24"	S19° 25' 37"W	9.55
C17	7.99	15.00	030°31'18"	S76° 19' 25"W	7.90
C18	15.50	25.63	034°38'31"	S75° 29' 18"E	15.26
C19	1.83	29.50	003°33'10"	N55° 55' 20"W	1.83
C20	4.79	29.50	009°17'47"	N34° 57' 39"W	4.78
C21	12.79	6.00	122°08'32"	N30° 45' 35"E	10.50
C22	39.27	25.00	090°00'00"	S46° 12' 01"W	35.36
C23	39.27	25.00	090°00'10"	S43° 48' 02"E	35.36
C24	28.24	29.50	054°50'44"	N61° 22' 37"W	27.17
C25	4.84	27.87	009°57'09"	N8° 30' 02"W	4.84
C26	23.36	27.50	048°40'06"	S84° 19' 28"E	22.66
C27	3.93	2.50	090°00'00"	S48° 48' 00"E	3.54
C28	8.76	30.66	016°21'58"	N52° 19' 39"W	8.73
C29	4.71	3.00	090°00'00"	S48° 48' 00"E	4.24
C30	13.09	15.00	050°00'00"	N86° 12' 00"E	12.68
C31	7.96	8.00	057°00'00"	N89° 42' 00"E	7.63
C32	22.07	29.50	042°51'45"	S22° 37' 53"W	21.56
C33	8.24	29.50	016°00'47"	S63° 44' 34"W	8.22
C34	3.96	2.00	113°27'27"	N34° 28' 18"E	3.34
C35	11.78	7.50	090°00'00"	N46° 12' 01"E	10.61
C36	11.78	7.50	090°00'00"	N43° 47' 59"W	10.61
C37	3.93	2.50	090°00'00"	S46° 12' 01"W	3.54
C38	3.93	2.50	090°00'00"	S43° 47' 59"E	3.54
C39	7.85	2.50	180°00'05"	S1° 12' 00"W	5.00
C40	7.85	2.50	180°00'00"	S1° 12' 00"W	5.00
C41	3.93	2.50	090°00'00"	S46° 12' 01"W	3.54
C42	3.93	2.50	090°00'00"	S43° 47' 59"E	3.54
C43	20.27	49.50	023°27'27"	S10° 31' 42"E	20.12
C44	3.14	2.00	090°00'00"	N43° 47' 59"W	2.83
C45	2.36	1.00	134°59'39"	S68° 40' 43"W	1.85
C46	35.34	22.50	090°00'00"	S43° 47' 59"E	31.82
C47	46.34	29.50	090°00'00"	N46° 12' 01"E	41.72
C48	3.14	2.00	090°00'00"	N43° 47' 59"W	2.83
C49	5.50	3.50	089°59'59"	S46° 12' 00"W	4.95
C50	4.32	5.50	045°00'00"	N21° 17' 59"W	4.21
C51	7.30	9.50	044°03'58"	S71° 53' 40"W	7.12
C52	14.84	17.00	050°00'00"	N83° 48' 00"W	14.37
C53	7.85	10.00	045°00'00"	S21° 17' 59"E	7.65
C54	2.36	1.00	135°00'00"	N68° 42' 01"E	1.85
C55	39.27	25.00	090°00'00"	S46° 12' 01"W	35.36
C56	4.71	3.00	090°00'00"	S43° 47' 59"E	4.24
C57	15.71	10.00	090°00'00"	N46° 12' 01"E	14.14
C58	22.49	30.00	042°57'04"	N20° 16' 31"W	21.97
C59	16.87	30.00	032°12'40"	N72° 50' 09"W	16.64
C60	2.63	24.02	006°16'18"	N65° 42' 24"E	2.63

TBC Curve Table					
C#	L	R	Δ	Chord Bearing	Chord L
C61	4.71	3.00	090°00'00"	S48° 48' 00"E	4.24
C62	4.71	3.00	090°00'00"	S41° 12' 00"W	4.24
C63	7.92	7.21	062°55'10"	N89° 15' 06"E	7.53
C64	10.77	100.00	006°10'08"	S1° 53' 03"E	10.76
C65	4.71	3.00	090°00'00"	N41° 12' 00"E	4.24
C66	37.60	34.50	062°26'46"	N27° 25' 23"E	35.77
C67	2.79	1.50	106°43'08"	S54° 33' 34"W	2.41
C68	14.03	5.50	146°11'09"	N1° 00' 43"E	10.52
C69	2.80	1.50	107°05'42"	S52° 20' 51"E	2.41
C70	8.81	28.73	017°34'21"	S54° 57' 04"W	8.78

VCBO ARCHITECTURE

SALT LAKE CITY, UT - HQ
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524 SOUTH 600 EAST
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801.576.8800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH — NICHOLE LEE LUTH — 8023335 — 11/08/23

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

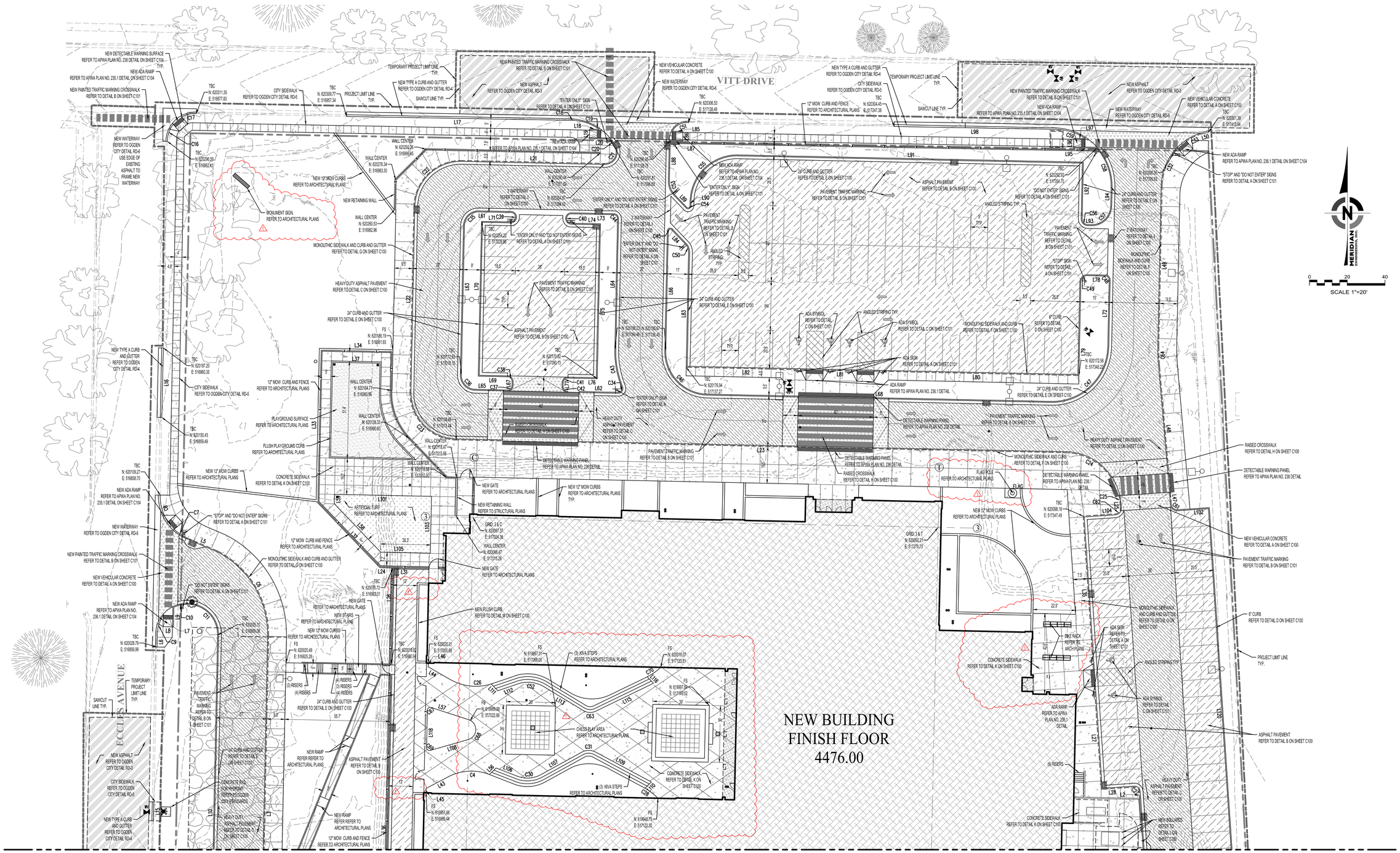
BID SET 5 - GENERAL CONSTRUCTION

OVERALL SITE PLAN

CS230

MERIDIAN ENGINEERING 25 YEARS OF EXCELLENCE

Blue Stakes of UTAH 811 — Utah811.org



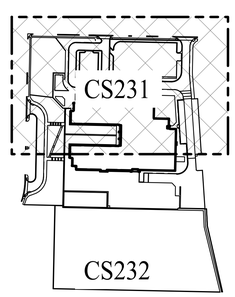
REFER TO SHEET CS231

ENLARGED SITE LAYOUT NOTES:

1. CURVE AND LINE DATA IS BASED ON THE TOP BACK OF CURB AND FRONT OF SIDEWALK. CURVE AND LINE DATA TABLES SHOWN ON SHEET CS230.
2. REFER TO NOTES ON SHEET CS230.

HATCH LEGEND

- VEHICULAR CONCRETE PER DETAIL A ON SHEET C100
- MONOLITHIC SIDEWALK AND CURB REFER TO DETAIL F ON SHEET C100
- NEW BUILDING
- NEW BUILDING OVERHANG
- ASPHALT PAVEMENT SEE DETAIL B ON SHEET C100
- MONOLITHIC SIDEWALK AND CURB AND GUTTER REFER TO DETAIL G ON SHEET C100
- NEW CITY ROW ASPHALT REFER TO OGDEN CITY DETAIL RD-3 ON SHEET C103
- ARTIFICIAL TURF REFER TO ARCHITECTURAL PLANS
- HEAVY DUTY ASPHALT PAVEMENT SEE DETAIL C ON SHEET C100
- 3' WATERWAY REFER TO DETAIL I ON SHEET C100
- UNDERGROUND DETENTION BASIN REFER TO C105 AND C0400
- 6" CURB SEE DETAIL D ON SHEET C100
- SIDEWALK PER DETAIL K ON SHEET C100
- NEW SURFACE UTILITIES REFER TO CU000
- 24" CURB AND GUTTER SEE DETAIL E ON SHEET C100
- PLAYGROUND SURFACE REFER TO ARCHITECTURAL PLANS
- NEW RETAINING WALL REFER TO STRUCTURAL PLANS



KEYMAP

VCBO ARCHITECTURE
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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

MERIDIAN ENGINEERING

STATE OF UTAH
11/08/23
NICHOLE LEE LUTH
8023335

REV	DATE	DESCRIPTION
1	11-16-2023	ADD#1

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

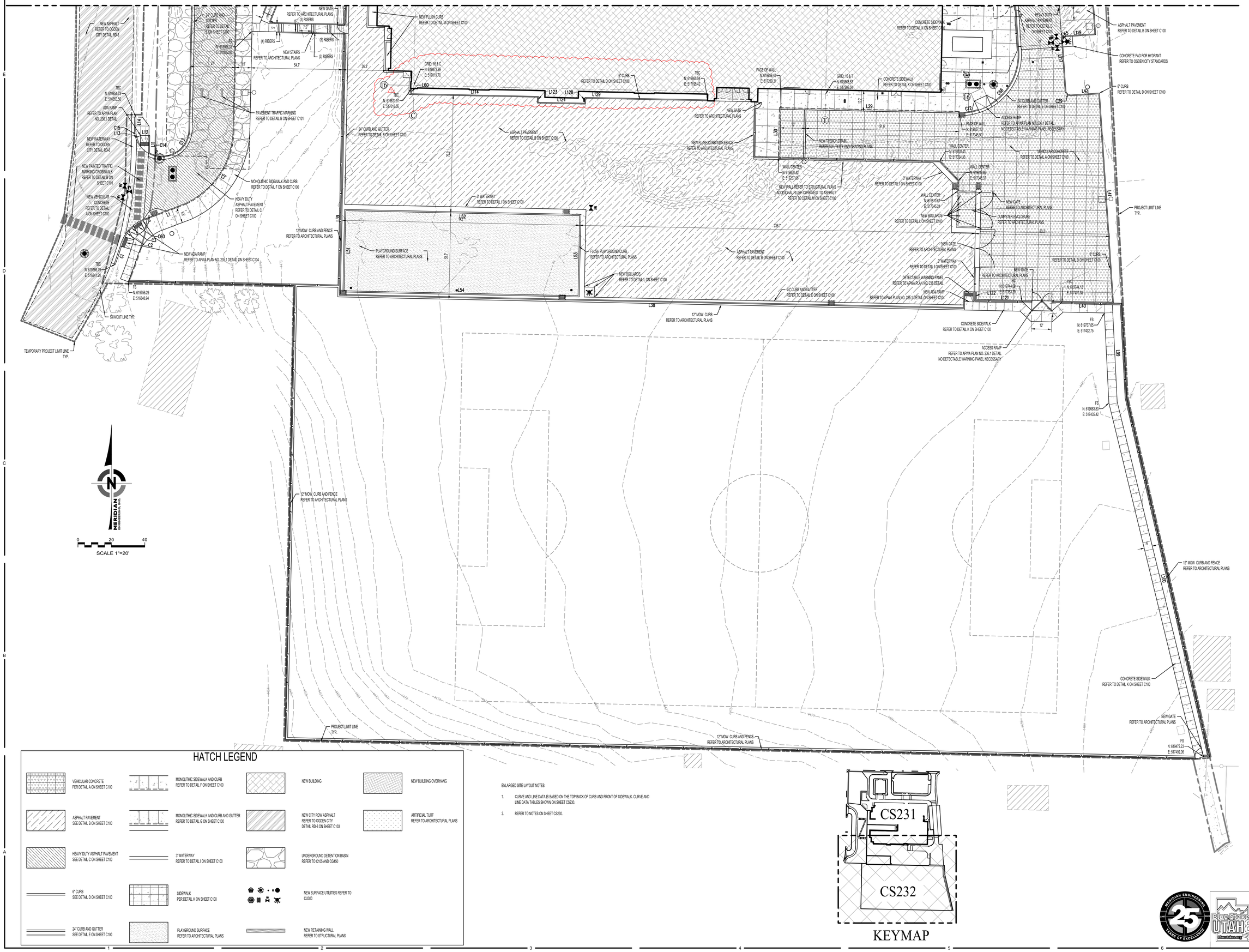
ENLARGED SITE PLAN

CS231

25 YEARS OF EXCELLENCE

Blue Stakes of Utah 811

REFER TO SHEET CS231



HATCH LEGEND

- VEHICULAR CONCRETE — PER DETAIL A ON SHEET C100
- MONOLITHIC SIDEWALK AND CURB — REFER TO DETAIL F ON SHEET C100
- NEW BUILDING
- NEW BUILDING OVERHANG
- ASPHALT PAVEMENT — SEE DETAIL B ON SHEET C100
- MONOLITHIC SIDEWALK AND CURB AND GUTTER — REFER TO DETAIL G ON SHEET C100
- NEW CITY ROW ASPHALT — REFER TO OGDEN CITY DETAIL RD-3 ON SHEET C103
- ARTIFICIAL TURF — REFER TO ARCHITECTURAL PLANS
- HEAVY DUTY ASPHALT PAVEMENT — SEE DETAIL C ON SHEET C100
- 3" WATERWAY — REFER TO DETAIL I ON SHEET C100
- UNDERGROUND DETENTION BASIN — REFER TO C105 AND CG460
- 6" CURB — SEE DETAIL D ON SHEET C100
- SIDEWALK — PER DETAIL K ON SHEET C100
- NEW SURFACE UTILITIES REFER TO CU000
- 24" CURB AND GUTTER — SEE DETAIL E ON SHEET C100
- PLAYGROUND SURFACE — REFER TO ARCHITECTURAL PLANS
- NEW RETAINING WALL — REFER TO STRUCTURAL PLANS

ENLARGED SITE LAYOUT NOTES:

1. CURVE AND LINE DATA IS BASED ON THE TOP BACK OF CURB AND FRONT OF SIDEWALK. CURVE AND LINE DATA TABLES SHOWN ON SHEET CS230.
2. REFER TO NOTES ON SHEET CS230.

KEYMAP

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STATE OF UTAH — NICHOLE LEE LITHY — 8023335 — 11/08/23

REV	DATE	DESCRIPTION
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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

ENLARGED SITE PLAN

CS232

GENERAL UTILITY NOTES:

1. PLUMBING CONTRACTOR WILL TERMINATE THEIR ROOF DRAIN LINES WITH A CLEAN OUT APPROXIMATELY 5' FROM THE BUILDING. COORDINATE WITH PLUMBING CONTRACTOR ON SCHEDULE AND PLACEMENT OF ROOF DRAIN LINES NEAR THE BUILDING.

2. ALIGN ALL INTERIOR AND EXTERIOR UTILITIES. SITE UTILITY CONTRACTOR TO COORDINATE PLACEMENT HORIZONTALLY AND VERTICALLY WITH BUILDING PLUMBING CONTRACTOR. SITE "INTERFACE LINE" BETWEEN THE BUILDING PLUMBING CONTRACTOR AND THE SITE UTILITY CONTRACTOR WILL BE AT 5' FROM THE BUILDING AND (EXCEPT FOR THE FIRE SPRINKLER LINE) A CLEAN OUT WILL BE INSTALLED BY THE PLUMBING CONTRACTOR APPROXIMATELY 5' FROM THE BUILDING FOR STORM DRAIN AND SEWER LINES. CONNECTION TO BUILDING PIPING AND ALL PIPING BEYOND THIS INTERFACE SHALL BE THE SITE UTILITY CONTRACTOR'S RESPONSIBILITY. PROVIDE REDUCERS, ADAPTERS, OR OTHER FITTINGS AS REQUIRED AT THE INTERFACE TO CONNECT TO BUILDING PIPE. COLLECT ROOF DRAIN LINES AS SHOWN AND ROUTE TO NEW CATCH BASINS OR CLEAN OUTS ON SITE. PREFERRED SLOPES, APPROXIMATE DISTANCES, AND INVERTS OF GRAVITY PIPING ARE SHOWN ON THE PLAN MAY REQUIRE ADJUSTMENT TO CONNECT TO BUILDING ROOF OR SEWER DRAIN LINES. MAINTAIN 2% SLOPE FOR 4" DIAMETER OR SMALLER PIPES, 1% FOR 6" AND 0.5% FOR 8" DIAMETER PIPES.

3. ALL PROPOSED SITE ELECTRICAL EQUIPMENT, STRUCTURES AND LINES SHOWN ON CIVIL PLANS ARE SCHEMATICALLY SHOWN ONLY AS A COORDINATION BETWEEN ELECTRICAL AND CIVIL. PLEASE REFER DIRECTLY TO ELECTRICAL PLANS FOR THE LAYOUT AND DETAILS OF ALL SITE ELECTRICAL EQUIPMENT AND LINES.

4. SITE CONTRACTOR SHALL COORDINATE WITH OGDEN CITY WHEN COMPLETING THE SEWER CONNECTION.

5. SITE CONTRACTOR SHALL COORDINATE WITH OGDEN CITY INSPECTOR WHEN COMPLETING WATER CONNECTIONS IN CITY STREETS OR ON SITE WHERE REQUIRED.

6. ALL CONSTRUCTION IN THE CULINARY WATERLINE AND SANITARY SEWER LINE PIPE ZONE SHALL COMPLY WITH ALL OGDEN CITY SPECIFICATIONS AND REQUIREMENTS. SEE GENERAL NOTES ON SHEET C100. WHERE THRUST BLOCKING CANNOT BE COMPLETED DUE TO OTHER ADJACENT UTILITIES OR OTHER SITE CONSTRAINTS, RESTRAINED JOINTS WILL BE REQUIRED PER OGDEN CITY STANDARD SPEC'S. THRUST BLOCK ALL WATERLINE FITTINGS PER OGDEN CITY STANDARDS TYP.

7. COORDINATES FOR FIRE HYDRANTS, CURB INLETS, CATCH BASINS, OR CLEAN OUTS ARE AT THE CENTER OF THE UTILITY STRUCTURE. ALL STORM DRAIN BOXES ARE 3'X3', UNLESS OTHERWISE NOTED OR THOSE INLETS PLACES IN CURB AND GUTTER.

8. ALL VALVES, AREA CATCH BASINS (NOT IN C&G), CLEAN OUTS, OR MANHOLES SHALL HAVE CONCRETE GRADE ADJUSTMENT COLLARS PLACED PER DETAIL ON C100.

9. STORM DRAIN CLEAN OUTS TO BE SIMILAR TO DETAIL SHOWN ON PLUMBING PLANS AND SHALL BE EXTENDED TO GRADE. ALL EXTERIOR ROOF DRAIN PIPING TO BE CAST IRON SOIL PIPE AND FITTINGS IN ACCORDANCE WITH ASTM A 74.

10. ROOF DRAIN CONNECTIONS AT CATCH BASINS OR CLEAN OUT BOXES TO BE CORE DRILLED AND EPOXY GROUTED INTO PRECAST BOXES DUE TO FIELD ADJUSTMENTS WHICH MAY BE NECESSARY TO CONNECT TO BUILDING PIPING. 3" &4" INTERIOR ROOF DRAIN PIPE TO BECOME 4" OR 6" STORM DRAIN PIPE. 5" &6" INTERIOR ROOF DRAIN PIPE TO BECOME 8" STORM DRAIN PIPE.

11. THE FIRE SPRINKLER LINE SHALL BE ROUTED INTO THE FIRE SPRINKLER ROOM INSIDE THE BUILDING AND TERMINATE 12" ABOVE FINISH FLOOR WITH A 6" FLANGE. CAP WITH BLIND FLANGE FOR LINE TESTING. REFER TO PLUMBING PLANS FOR RISER LOCATION IN THE BUILDING. THE FIRE SERVICE LINE SHALL BE CEMENT LINED DUCTILE IRON PIPE (PER AWWA C151.55) PSI AND AWWA C104) WRAPPED IN POLYETHYLENE (PER AWWA C105) FROM THE BUILDING CONNECTION TO THE TEE AT THE FIRE LOOP CONNECTION PER CITY WATER STANDARD SPECIFICATIONS AND DETAILS.

12. ALL CONSTRUCTION, PIPING MATERIALS AND INSTALLATION TO BE:

WATER LINES:
- 4",6" AND 8" PVC AWWA C-900 WITH CEMENT MORTAR-LINED DUCTILE IRON PIPE FITTINGS WRAPPED IN 10 MIL. POLYETHYLENE SLEEVES PER AWWA C-105 AND PER CITY STANDARDS.
- 6" FIRE SPRINKLER LINE PER CITY STANDARD.

SEWER LINES, MANHOLES, AND CLEANOUTS:
- PVC PIPE 6" TO 8" (SDR 35), USE 6" DI AT FITTING ON SERVICE LINES TO BUILDINGS. REFER TO CLEAN OUT DETAILS.
- MANHOLES AND CLEANOUTS TO OGDEN CITY STANDARDS.

STORM DRAIN:
- 6" TO 15" HDPE PIPE WITH WATER TIGHT JOINTS. WYE FITTING TO BE WATER TIGHT JOINT STANDARDS.
- PIPING IN CITY ROW TO BE RCP.
- WALL DRAINS AND PLAYGROUND DRAINS TO BE 4" PERFORATED PVC PIPE (DRS 35).

GAS LINE:
- DOMINION ENERGY. COORDINATE WITH DOMINION ENERGY

13. PROJECT SHALL COMPLY WITH ALL UTAH DIVISION OF DRINKING WATER RULES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, THOSE PERTAINING TO BACKFLOW PROTECTION AND CROSS CONNECTION PREVENTION. ANY NEW BACKFLOW DEVICES AND THE STOP AND WASTE VALVE ARE SHOWN ON THE LANDSCAPE DRAWINGS.

14. INSPECTION AND APPROVAL FOR THE SEWER/WATER LINE CROSSINGS ON SITE SHALL BE REVIEWED AND APPROVED BY OGDEN CITY PRIOR TO CONSTRUCTION OF THE CROSSING. OGDEN CITY SHALL ALSO INSPECT THE CROSSING PRIOR TO BACKFILL.

15. REFER TO SHEET C200 FOR PROJECT BASIS OF BEARING, BASIS OF COORDINATES AND BENCHMARK.

16. ALL UTILITIES OUTSIDE OF PUBLIC R.O.W. ARE PRIVATELY OWNED AND SHALL BE MAINTAINED BY OWNER UNLESS NOTED OTHERWISE.

17. POT HOLE AND FIELD VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.

18. USE FLOWABLE FILL BETWEEN UTILITY CROSSINGS THAT ARE LESS THAN 12" SEPARATION. ALL GRAVITY LINES MUST BE INSTALLED BEFORE PRESSURIZED LINES.

19. PIPING LENGTHS ARE APPROXIMATE LENGTHS AND ARE ROUNDED TO THE NEAREST FOOT. LENGTHS ARE FROM CENTER TO CENTER OF INLETS OR CLEANOUTS. PIPE SLOPES ARE ALSO APPROXIMATE. USE INVERTS AT EACH BOX FOR CONTROL OF PIPE INSTALLATION.

20. ALL FIRE SPRINKLER LINES SHALL HAVE 60" OF COVER MINIMUM. ALL OTHER WATERLINES INCLUDING EXISTING LINES TO HAVE 48" MINIMUM COVER.

21. POTHOLE ALL EXISTING UTILITY CROSSINGS PRIOR TO ROUTING ANY NEW UTILITIES. ALL NEW SEWER, DRAINAGE, OR OTHER GRAVITY LINES SHALL BE COMPLETED PRIOR TO ROUTING ANY PRESSURE LINES. WHERE EXISTING UTILITIES CONFLICT WITH NEW GRAVITY LINES, RAISE OR LOWER EXISTING UTILITIES TO ACCOMMODATE NEW GRAVITY LINES. PROVIDE 12" MIN. CLEARANCE BETWEEN WATER AND OTHER UTILITIES. WATER LINES SHALL NOT BE PLACED UNDER SEWER LINES AND SHALL HAVE A MINIMUM OF 18" CLEARANCE OF SEWER.

22. THRUST BLOCK ALL FITTINGS OR PROVIDE RESTRAINED JOINTS PER CITY STANDARDS. THE NEW 4" AND 6" CONNECTIONS TO THE NEW BUILDING WILL REQUIRE RESTRAINED JOINTS FOR MANY FITTINGS DUE TO LIMITED SPACE BETWEEN PIPES.

23. COORDINATE WITH LANDSCAPE PLANS PRIOR TO COMPLETION OF PAVEMENT FOR INSTALLATION OF IRRIGATION SLEEVES ACROSS PAVING OR PARKING AREAS.

24. WATER VALVES, SEWER MANHOLES, STORM DRAIN INLETS OR CLEANOUT BOXES, AND OTHER SURFACE UTILITY ACCESSORIES SHALL BE RAISED AND SLOPED TO ACCURATE FINISH SURFACE BY A CONCRETE GRADE COLLAR IN PAVEMENT. COLLAR SHALL BE A 12" WIDE AROUND THE UTILITY APPARATUSES AND 8" MINIMUM THICKNESS. PLACE 2 #4 REBAR HOOPS IN COLLAR. REFER TO DETAIL J ON SHEET C100. CONCRETE COLLARS TO BE USED IN ONLY ASPHALT PAVEMENT AREAS OR PAVER AREAS.

25. WHERE UTILITY LINES CROSS OR ARE ADJACENT TO SITE WALLS, WALL FOOTINGS, SHALL STEP BELOW UTILITIES FOR WATER AND STORM DRAIN LINES THAT DO NOT HAVE 3' OF FILL BETWEEN THE BOTTOM OF THE NORMAL WALL FOOTING DEPTH (30" DEPTH) AND THE TOP OF PIPE REFER TO DETAIL ON STRUCTURAL PLANS FOR TYPICAL FOOTING STEP DETAIL. WHERE UTILITY LINES HAVE A MINIMUM OF 3' OF FILL BETWEEN THE TOP OF PIPE AND BOTTOM WALL FOOTING THE WALL FOOTING DOES NOT NEED TO STEP BELOW THE NORMAL 30" DEPTH.

26. USE HS-20 SOLID COVERS ON ALL MANHOLES, CIB, AND CBS. AD AND ADS BOXES TO HAVE PEDESTRIAN TRAFFIC GRATED COVERS EXCEPT AS NOTED. ALL CIB BOXES TO HAVE HS-20 FRAME AND GRATES.

27. REPAIR PAVEMENT, AS WELL AS CURB AND GUTTER, AND SIDEWALKS WHERE UTILITIES CROSS INTO PUBLIC R.O.W. TO MAINTAIN TRAFFIC THROUGH THESE AREAS. ALL REPAIR IN PUBLIC R.O.W. TO MEET APWA AND CITY STANDARDS.

28. SET NEW UTILITY MANHOLE OR STRUCTURE OVER EXISTING PIPING WHERE NEW AND EXISTING PIPING CONNECT. RECONNECT ALL EXISTING PIPING TO NEW STRUCTURES. PROVIDE NEW SECTIONS OF PIPE IF NECESSARY TO RECONNECT ALL PIPING TO THE NEW UTILITY STRUCTURES.

29. GAS LINE CONSTRUCTION TO THE BUILDING METER WILL BE COMPLETED BY DOMINION ENERGY! COORDINATE GAS INSTALLATION WITH DOMINION ENERGY.

30. 8"X6" WYE FITTINGS FOR ROOF DRAIN OR OTHER WYE CONNECTIONS TO THE 8" OR 8" PVC DRAIN LINES TO BE DI FITTINGS WRAPPED IN 10 MIL. POLYETHYLENE (PER AWWA C105). PLACE CONCRETE ON WYE FITTING SIMILAR TO THE CLEANOUT DETAIL (DETAIL E ON C-101).

31. CONTRACTOR RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS AND INSPECTIONS WHILE WORKING IN THE PUBLIC RIGHT OF WAY.

32. THE TRENCH DRAIN (TD-1) TO BE A "ZURN Z874-12-DCF" 12-INCH TRENCH DRAIN. THE DEEP INVERT OF THE TRENCH TO BE 12.5" MINIMUM DEPTH WITH A 8" END OUTLET TO A 30" CATCH BASIN. SLOPE TRENCH PER MANUFACTURERS STANDARD SLOPE.

33. PROJECT LOCATED IN FEMA FLOOD PLAIN ZONE MAP 49057C0214E, EFF. 12/16/2005.

34. VALVES ATTACH DIRECTLY TO TEE FITTINGS. "-FL" INDICATES FLANGE FITTING AND "-MJ" INDICATED MECHANICAL JOINT FITTING. ALL VALVING WILL CONNECT TO MAIN LINE PIPE WITH FLANGE FITTING. MAIN LINE FITTINGS CONNECTING TO VALVES WILL ALSO BE FLANGE FITTINGS. WRAP AND GREASE ALL FITTINGS PER SPECIFICATIONS AND NOTES.

35. ALL MANHOLES (BOTH SEWER AND STORM) TO BE 4' IN DIAMETER UNLESS SPECIFIED OTHERWISE.

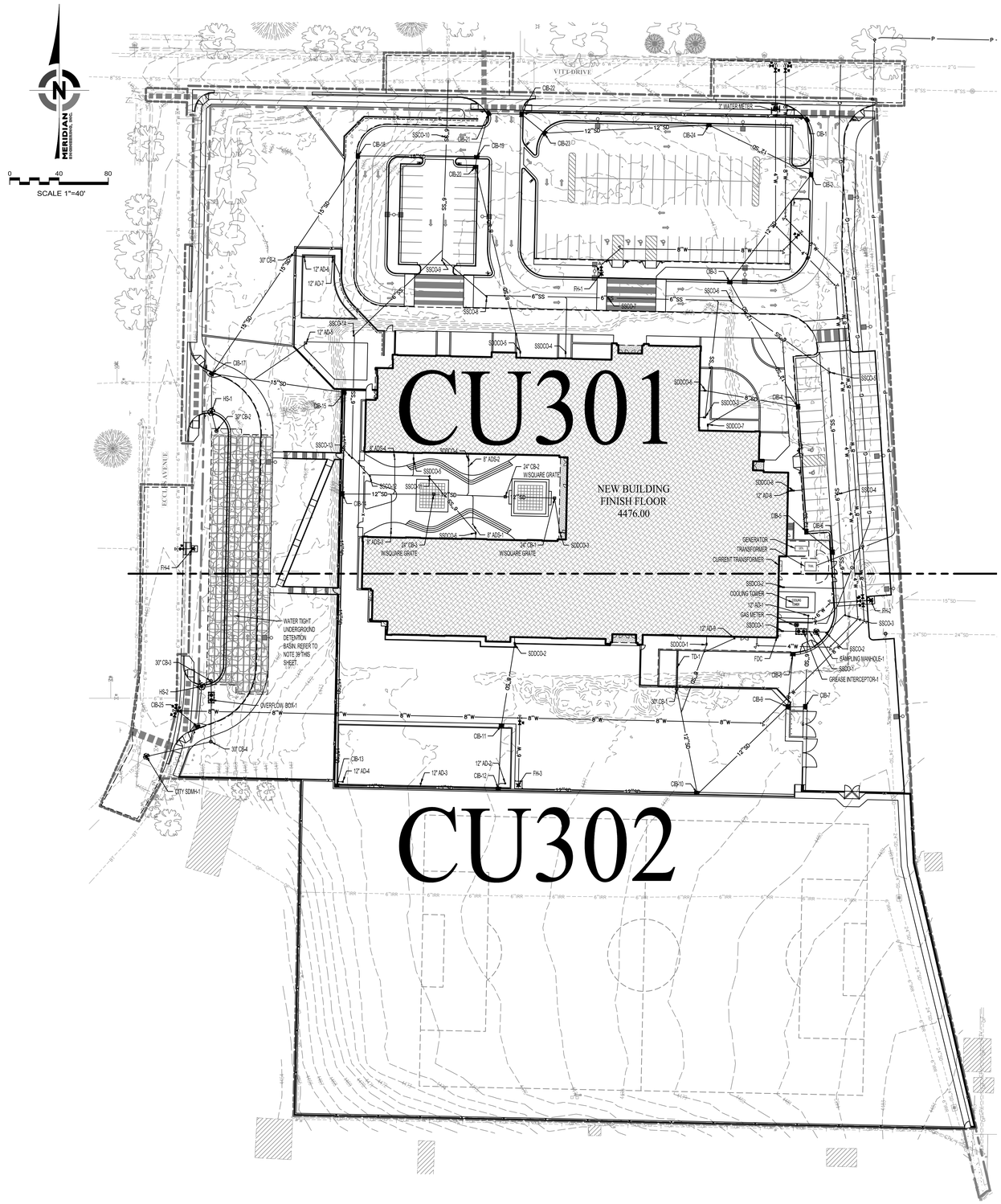
36. ALL WYE FITTINGS FOR STORM DRAIN PIPING TO BE FACTORY FABRICATED. WHERE MAIN PIPE IS 8" OR LARGER, USE FLOWABLE FILL 3' UPSTREAM AND DOWNSTREAM FROM ALL FITTINGS. WYE FITTINGS CONNECTING TO PIPE LARGER THAN 8" SHALL BE NEAR THE TOP OF THE MAIN STORM DRAIN PIPE. FLOWABLE FILL MAY TERMINATE 6" ABOVE THE TOP OF THE SMALLER STORM DRAIN PIPE CONNECTION TO THE MAIN PIPE. PROVIDE A MINIMUM OF 18" TOPSOIL COVER OVER TOP OF FLOWABLE FILL IN LANDSCAPE AREAS.

37. THE CONTRACTOR SHALL MAINTAIN 10 FOOT HORIZONTAL AND 18 INCH VERTICAL SEPARATION BETWEEN SANITARY SEWER AND CULINARY WATER LINES. FOLLOW CITY STANDARDS FOR ALL WATER/SEWER CROSSINGS.

38. SPOT ELEVATION PREFIX OF 44 HAS BEEN DROPPED FROM THE ELEVATIONS IE: ELEVATION 00.00 = 4400.00 AND 96.50 = 4496.50.

39. 30 MIL PVC IMPERMEABLE LINER REQUIRED FOR STORMTECH SYSTEM. LINER TO BE PVC WELDED ON SITE AND TESTED FOR WATER TIGHTNESS BEFORE BEING BURIED. REFER TO STORM TECH DETAILS ON C105.

STRUCTURE LABEL	DETAIL #
SDCO & SSCO - STORM AND SEWER CLEANOUT	DETAIL D SHEET C101
ADS - 8'ID AREA DRAIN	DETAIL E SHEET C101
AD - 12'ID AREA DRAIN	DETAIL F SHEET C101
CB-24" CATCH BASIN W/SQUARE GRATES	DETAIL G SHEET C101
CB - 30" CATCH BASIN	DETAIL H SHEET C101
CIB - CURB AND GUTTER INLET	DETAIL I SHEET C101
OVERFLOW BOX	DETAIL J SHEET C101
CITY SDMH - CITY STORM DRAIN MANHOLE	DETAIL SD-4 SHEET C102
FH - FIRE HYDRANT	DETAIL W-2 SHEET C102
3" WATER METER	DETAIL W-5 AND W-9 SHEET C102
HS - HYDRODYNAMIC SEPARATOR	DETAIL A SHEET C104
TD - TRENCH DRAIN	SEE NOTE 32 THIS SHEET



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STATE OF UTAH
NICHOLE LEE LITH
8023335
11/08/23

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

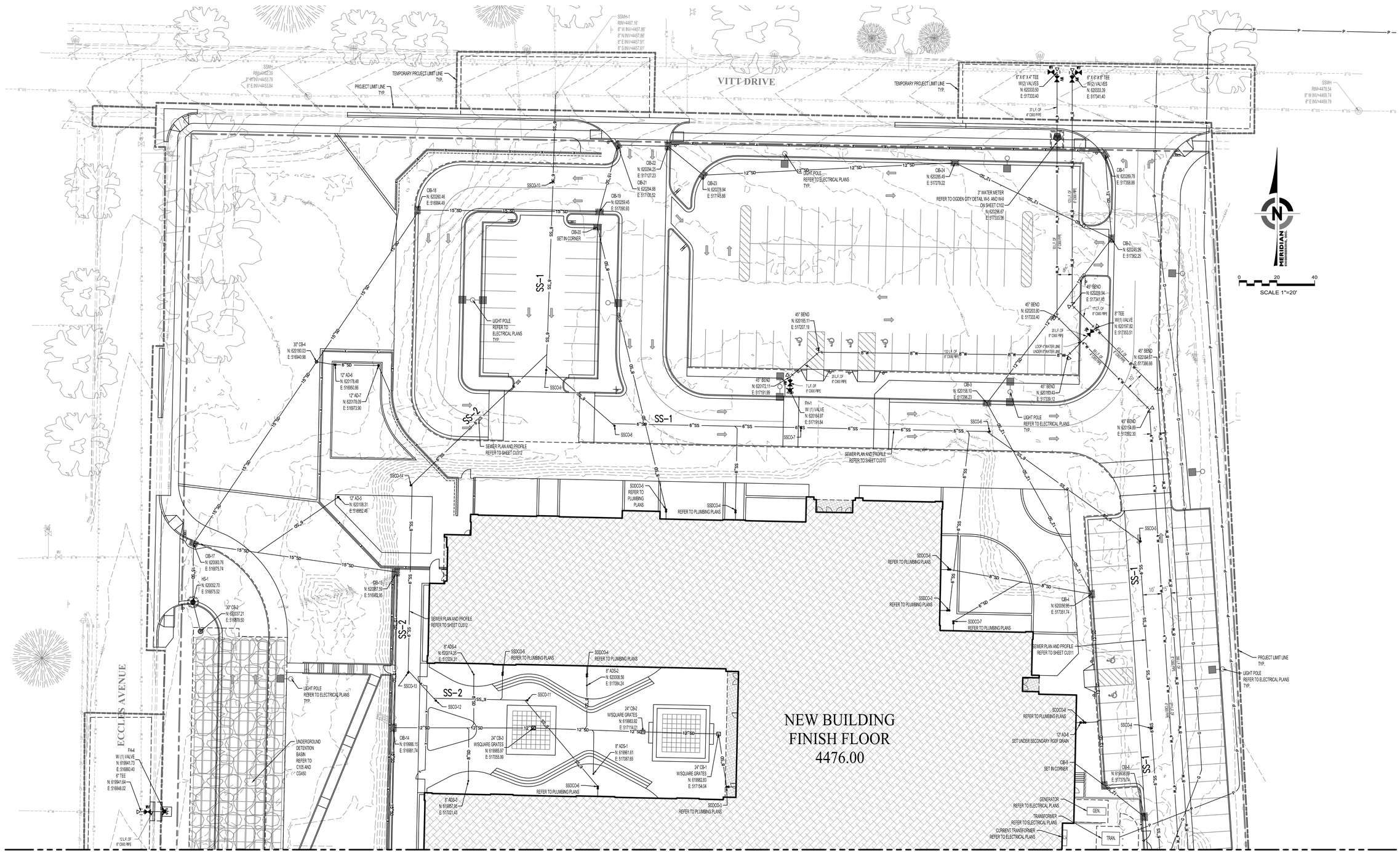
BID SET 5 - GENERAL CONSTRUCTION

OVERALL UTILITY PLAN

CU300

MERIDIAN ENGINEERING 25 YEARS OF EXCELLENCE

Blue Stakes of UTAH 811 Bluestakes.org



REFER TO SHEET CU302

STRUCTURE LABEL	DETAIL #
SDCO & SSCO - STORM AND SEWER CLEANOUT	DETAIL D SHEET C101
ADS - 8"Ø AREA DRAIN	DETAIL E SHEET C101
AD - 12"Ø AREA DRAIN	DETAIL F SHEET C101
CB-24" CATCH BASIN W/SQUARE GRATES	DETAIL G SHEET C101
CB - 30" CATCH BASIN	DETAIL H SHEET C101
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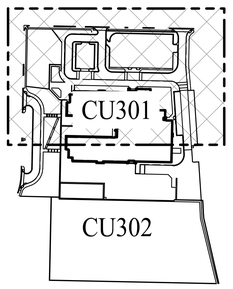
FH - FIRE HYDRANT	DETAIL W-2 SHEET C102
3" WATER METER	DETAIL W-5 AND W-9 SHEET C102
HS - HYDRODYNAMIC SEPARATOR	DETAIL A SHEET C104
TD - TRENCH DRAIN	SEE NOTE 32 ON SHEET CU300

ENLARGED UTILITY NOTES:

1. REFER TO NOTES ON SHEET CU300.



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OSD HILLCREST ELEMENTARY REBUILD

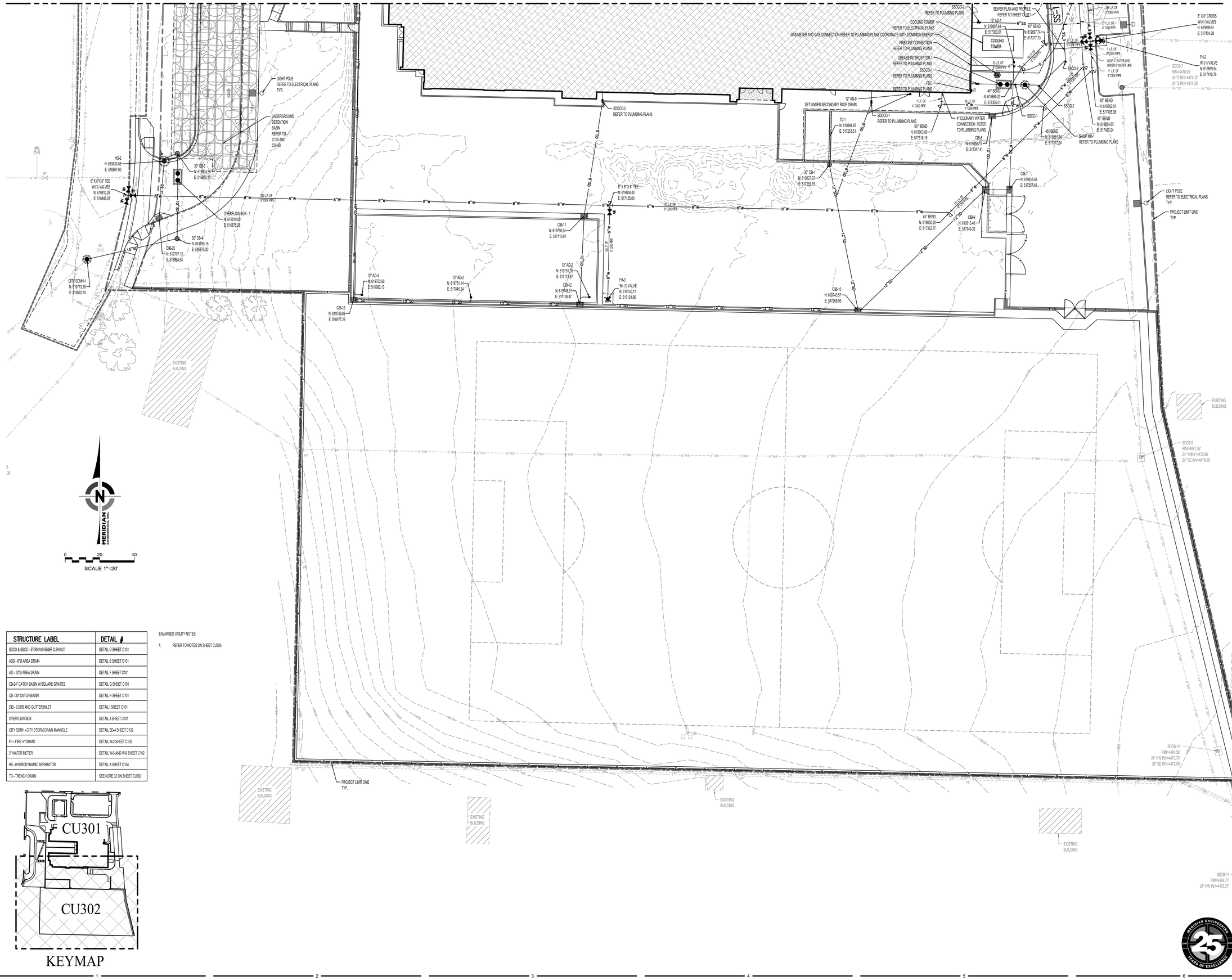
130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

ENLARGED UTILITY PLAN

CU301

REFER TO SHEET CU302



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FH - FIRE HYDRANT	DETAIL W-2 SHEET C102
3" WATER METER	DETAIL W-5 AND W-9 SHEET C102
HS - HYDRODYNAMIC SEPARATOR	DETAIL A SHEET C104
TD - TRENCH DRAIN	SEE NOTE 32 ON SHEET CU300

ENLARGED UTILITY NOTES:

1. REFER TO NOTES ON SHEET CU300.

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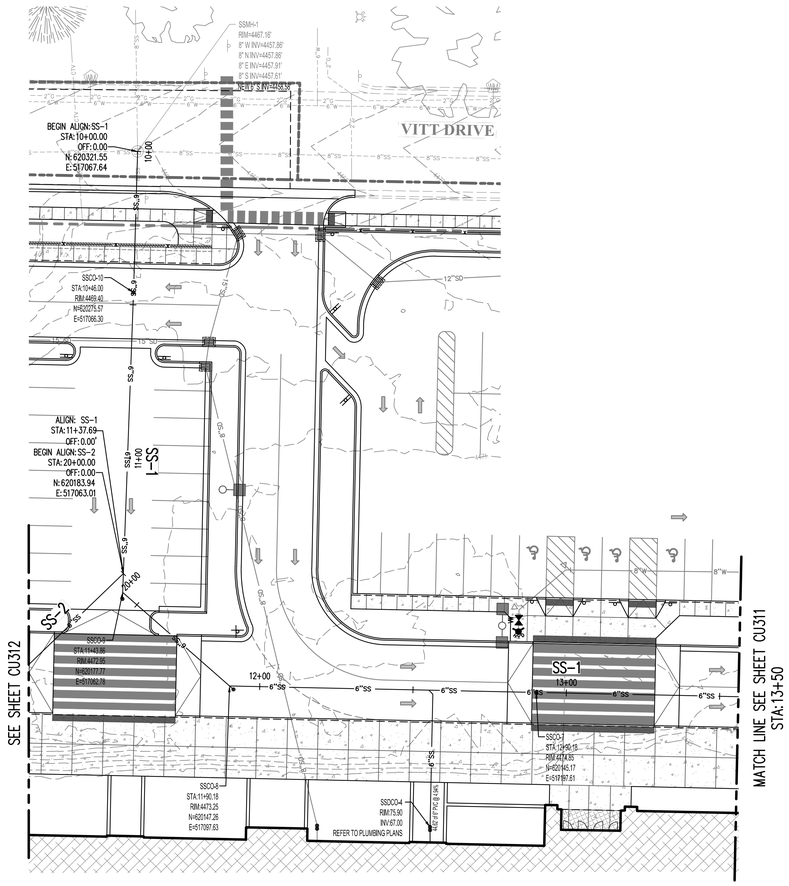
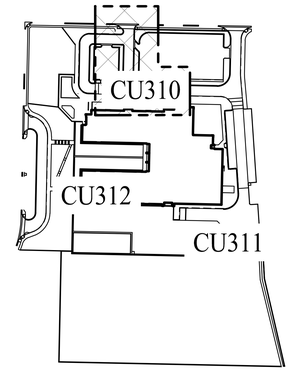
BID SET 5 - GENERAL CONSTRUCTION

ENLARGED UTILITY PLAN

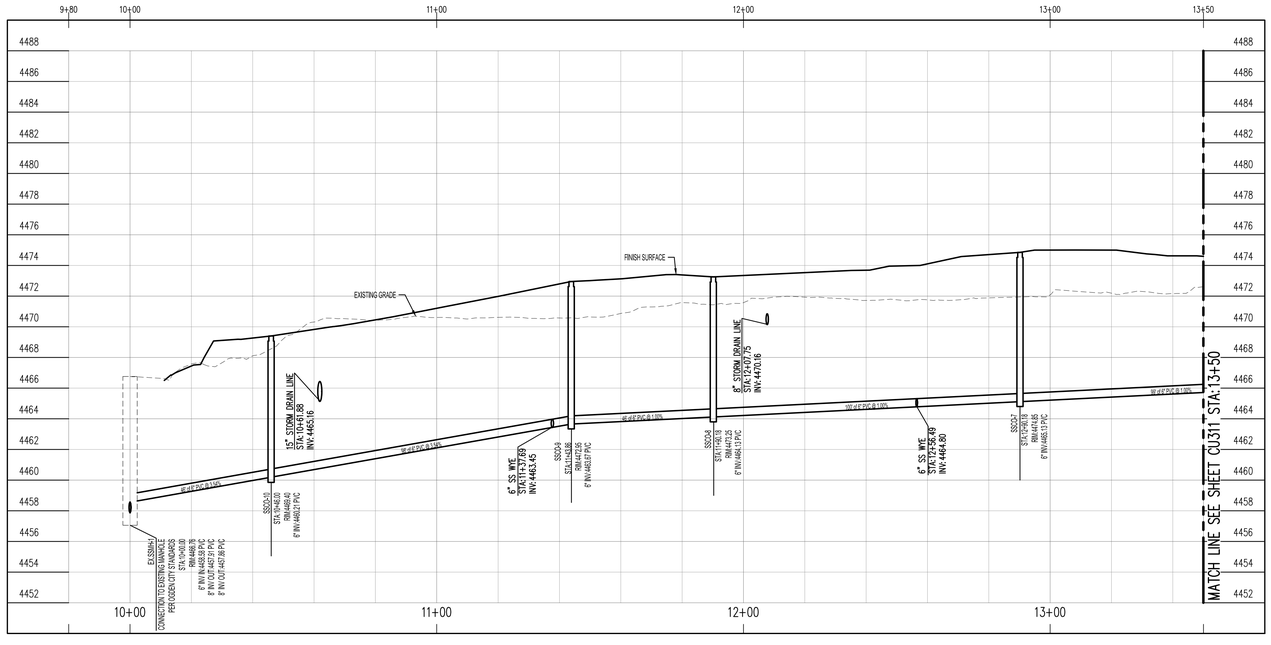
CU302





KEYMAP

NOTES: REFER TO NOTES ON CU300.



SS-1 SEWERLINE PROFILE

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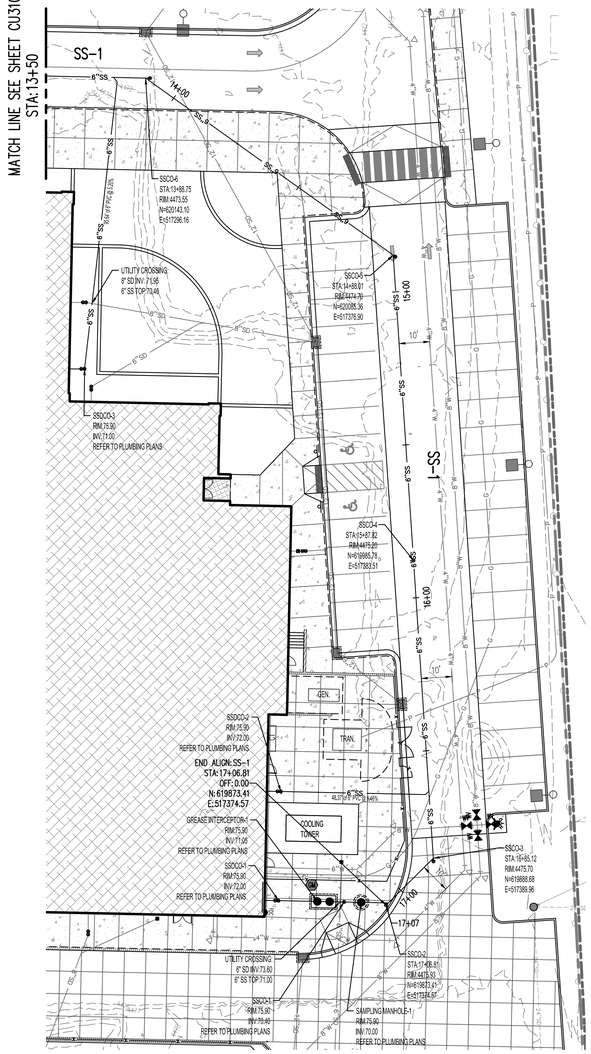
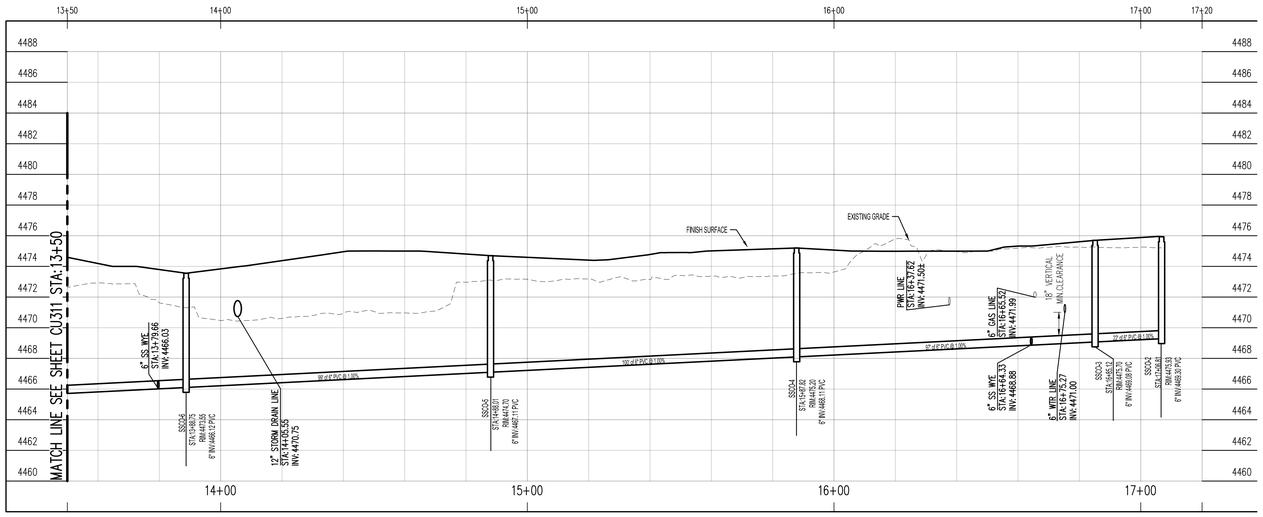
130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

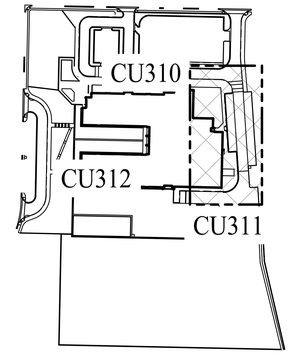
ON SITE SEWER
PLAN AND PROFILE

CU310





SS-1 SEWERLINE PROFILE



KEYMAP

HORIZONTAL SCALE
0 20 40
SCALE 1"=20'

VERTICAL SCALE
0 4 8
SCALE 1"=4'

NOTES: REFER TO NOTES ON CU300.

VCBO ARCHITECTURE

SALT LAKE CITY, UT - HQ
ST. GEORGE, UT
LAIE, HI

524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.575.8800
VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: AUGUST 2, 2023

STATE OF UTAH
NICHOLE LEE LITH
8023335
11/08/23

REV	DATE	DESCRIPTION

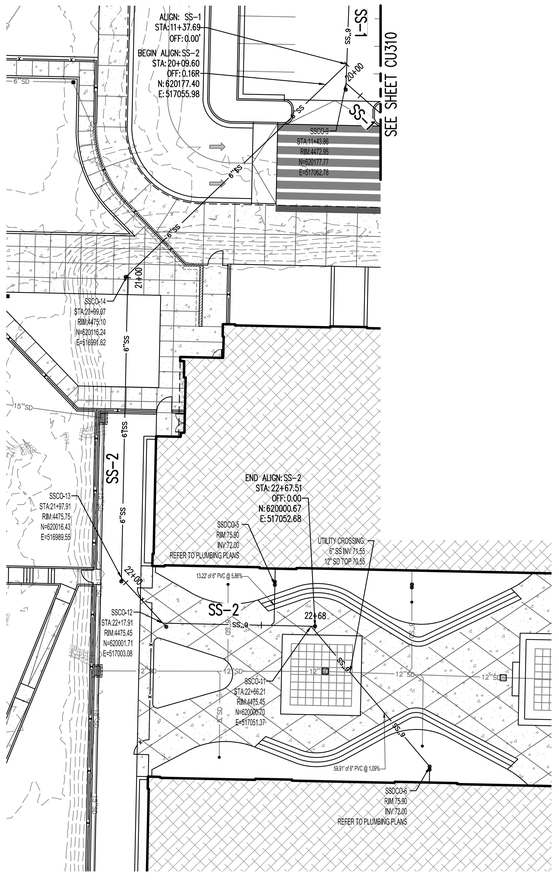
OSD HILLCREST ELEMENTARY REBUILD

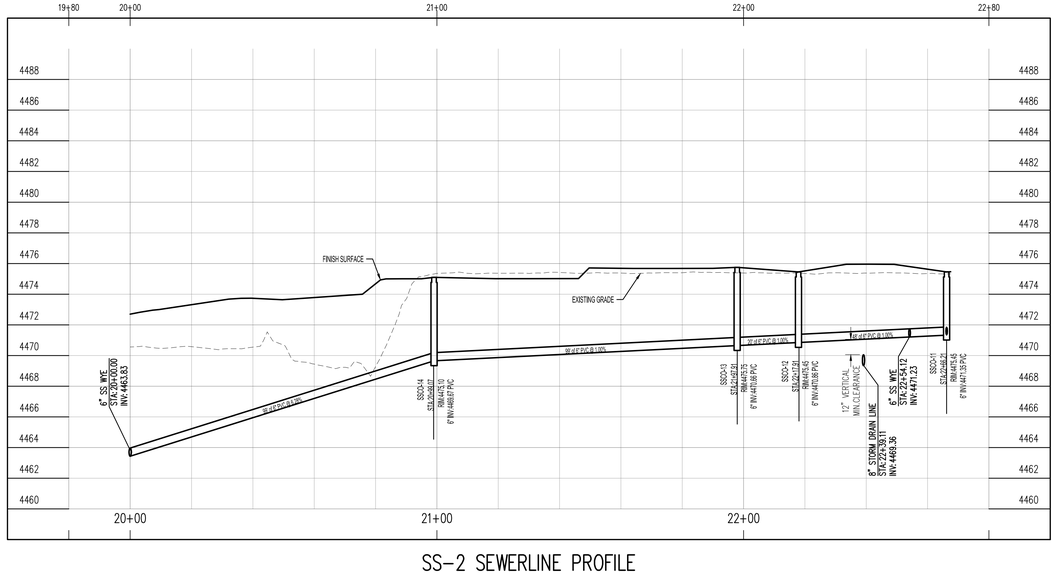
130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 5 - GENERAL CONSTRUCTION

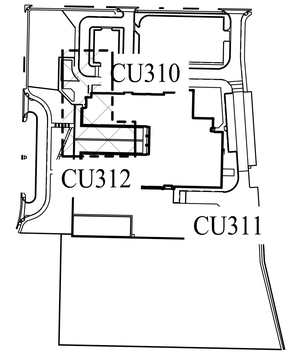
ON SITE SEWER PLAN AND PROFILE

CU311





SS-2 SEWERLINE PROFILE



KEYMAP

HORIZONTAL SCALE
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SCALE 1"=20'

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NOTES: REFER TO NOTES ON CU300.

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BID SET 5 - GENERAL CONSTRUCTION

ON SITE SEWER
PLAN AND PROFILE

CU312

GENERAL NOTES

1. CONSULT ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
2. VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH IN. CONSULT ALL APPLICABLE CONTRACT DRAWINGS AND SHOP DRAWINGS TO INSURE NEC CODE CLEARANCES REQUIRED AROUND ALL ELECTRICAL EQUIPMENT.
3. CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENTS, ETC) OF ALL EQUIPMENT FURNISHED UNDER ALL DIVISIONS, INCLUDING ALL EXISTING EQUIPMENT TO BE RE-USED. REVIEW ALL SHOP DRAWINGS AND EXISTING EQUIPMENT BEFORE BEGINNING ROUGH-IN.
4. SEE SECTION 26 5100 OF THE SPECIFICATION FOR REQUIRED COORDINATION MEETINGS WITH MECHANICAL AND CEILING CONTRACTORS.
5. SEE APPLICABLE SHOP DRAWINGS FOR ROUGH IN LOCATION OF ALL EQUIPMENT, WIRING DEVICES, ETC. WHERE APPLICABLE MOUNT ALL WIRING DEVICES ABOVE BACK SPLASH EXCEPT THOSE SERVING UNDER COUNTER EQUIPMENT.
6. FINISHES OF ALL LIGHT FIXTURES SHALL BE AS SELECTED BY ARCHITECT.
7. THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE MECHANICAL CONTRACTOR SUCH THAT NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THRU ELECTRICAL ROOMS OR SPACES, OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS.
8. ELECTRICAL BOXES SHALL NOT BE LOCATED IN MASONRY COLUMNS IN BRICK WALLS OR IN GROUTED CELLS ADJACENT TO OPENINGS. COORDINATE LOCATION OF BOXES WITH MASONRY CONTRACTOR.
9. ALL PENETRATIONS OF FIRE RATED FLOORS, WALLS, AND CEILINGS SHALL BE SEALED WITH APPROVED MATERIAL TO MAINTAIN FIRE RATING OF SURFACE PENETRATED.
10. CONTRACTOR SHALL VERIFY FURNITURE LAYOUT PRIOR TO ANY FLOORBOX OR POKE-THRU INSTALLATION. COORDINATE EXACT LOCATION OF FLOOR BOX OR POKE-THRU WITH OWNER AND FURNITURE PROVIDER PRIOR TO ROUGH-IN.
11. CIRCUITS EXTENDING OVER 70' FOR 120 VOLT AND 115' FOR 277 VOLT 20 AMP CIRCUITS SHALL BE RUN WITH CONDUCTORS PER TABLE BELOW.

20 AMP MINIMUM BRANCH CIRCUIT CONDUCTOR SIZING		
MAXIMUM LENGTH	BRANCH CIRCUIT VOLTAGE	
CONDUCTOR LENGTH (FT)	120 VOLT	277 VOLT
<70	MIN. #12 AWG	MIN. #12 AWG
70 - 115	MIN. #10 AWG	MIN. #12 AWG
115 - 170	MIN. #8 AWG	MIN. #10 AWG
170 - 270	MIN. #6 AWG	MIN. #8 AWG
271 - 380	NOTE B	MIN. #8 AWG
>380	NOTE B	NOTE B

A. THESE ARE BASED ON MAXIMUM LENGTH OF CIRCUIT.

B. PERFORM VOLTAGE DROP CALCULATIONS AND PROVIDE CONDUCTOR SIZE TO KEEP BRANCH CIRCUIT VOLTAGE DROP LESS THAN 3% WITH A 15 AMP LOAD.

C. CONTRACTOR SHALL ENSURE THAT THE INSTALLATION OF EACH BRANCH CIRCUIT STAYS WITHIN 3% VOLTAGE DROP FOR A 15 AMP LOAD. IF NECESSARY,CONTRACTOR SHALL INCREASE WIRE AND CONDUIT SIZE TO MEET THE STANDARD AT NO ADDITIONAL COST TO OWNER.

13. ALL CONDUIT SHALL BE INSTALLED IN STRAIGHT LINES PARALLEL TO, OR AT RIGHT ANGLES TO, THE STRUCTURE OR ADJACENT BUILDING ELEMENTS. SEPARATIONS BETWEEN CONDUITS AND FASTENINGS OF CONDUITS SHALL BE NEAT AND CONSISTENT. CONDUIT SHALL BE INSTALLED AS TIGHT TO THE BOTTOM OF STRUCTURAL ELEMENTS WHEN PARALLEL TO JOISTS AS CODE WILL ALLOW. OVERALL INSTALLATION SHALL BE ACCOMPLISHED IN AN AESTHETIC AND WORKMANLIKE MANNER. NO CONDUITS SHALL BE ALLOWED TO RUN PERPENDICULAR TO THE BOTTOM CHORD OF THE JOISTS.
14. DIVISION 26 SHALL VISIT SITE PRIOR TO BIDDING. BIDS SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS. FIELD VERIFY ALL ELECTRICAL EQUIPMENT.
15. BIDDERS SHALL EXAMINE THE SITE AND THE COMPLETE SET OF PLANS AND SPECIFICATIONS COVERING THE ENTIRE PROJECT. THEY SHALL BECOME FULLY CONVERSANT WITH THE TYPE OF GENERAL CONSTRUCTION AS WELL AS ALL PERTINENT FACTS AFFECTING THE COST OF CARRYING OUT THE WORK THEY WILL CONTRACT TO PERFORM.
16. ELECTRICAL CONTRACTOR SHALL COORDINATE PROJECT PHASING WITH GENERAL CONTRACTOR AND BID AND PERFORM RESPONSIBILITIES FOR THIS PROJECT TO GENERAL CONTRACTOR EXPECTATIONS.
17. COORDINATE ELECTRICAL DEMOLITION WITH ARCHITECTURAL DRAWINGS AND GENERAL CONTRACTOR.
18. CLOSELY COORDINATE ANY REQUIRED POWER SHUTDOWNS WITH HEAD CUSTODIAN AND OWNER.
19. WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT DOCUMENTS THAT DO NOT CHANGE THE SCOPE OF INSTALLATION OR NATURE OF WORK REQUIRED, THE CONTRACTOR WILL MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. NO OTHER CHANGES MAY BE MADE WITHOUT WRITTEN PERMISSION OF THE OWNER.
20. SEQUENCE, COORDINATE, AND INTEGRATE INSTALLATIONS OF ELECTRICAL MATERIALS AND EQUIPMENT FOR EFFICIENT FLOW OF THE WORK. GIVE PARTICULAR ATTENTION TO LARGE EQUIPMENT REQUIRING POSITIONING PRIOR TO CLOSING-IN THE BUILDING. COORDINATE THE CUTTING AND PATCHING OF BUILDING COMPONENTS TO ACCOMMODATE INSTALLATION OF ELECTRICAL EQUIPMENT AND MATERIALS.
21. DO NOT PENETRATE STRUCTURAL ELEMENTS OF FLOORS, WALLS, CEILINGS, ROOFS, ETC.
22. DISCONNECT AND RECONNECT ANY/ALL FIXTURES, DEVICES, EQUIPMENT, ETC. REQUIRED FOR PROPER COMPLETION OF THE WORK.
23. CONTRACTOR MUST CONCEAL ALL RACEWAY THROUGHOUT THE PROJECT. SURFACE MOUNT RACEWAY IS UNACCEPTABLE EXCEPT WHERE THE USE OF PAINTED SURFACE METAL RACEWAYS (EMT) IS APPROVED SOLEY BY THE ARCHITECT. PAINT TO MATCH SURROUNDING SURFACE.
24. ALL CONCRETE CUT AND PATCH WORK REQUIRED FOR FLOOR BOXES INSTALLATION AND/OR RELOCATION OF ELECTRICAL DEVICES AND PANELS THAT REQUIRE WORK WITHIN THE FLOORS SHALL BE DONE BY ELECTRICAL CONTRACTOR. ALL CORE CUTTING FOR NEW SERVICE SHALL ALSO BE COVERED UNDER ELECTRICAL CONTRACTORS REQUIRED WORK.
25. CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE OF ALL WASTE, SURPLUS MATERIALS, RUBBISH OR DEBRIS WHICH IS CAUSED BY HIS EMPLOYEES OR RESULTING FROM HIS WORK. AFTER ALL EQUIPMENT AND DEVICES HAVE BEEN INSTALLED, REMOVE ALL LABELS, STICKERS, STAINS, TEMPORARY COVERS, ETC. IDENTIFICATION PLATES ON ALL EQUIPMENT.
26. IT IS THE INTENT THAT THE FOREGOING WORK SHALL BE COMPLETE IN EVERY RESPECT AND THAT ANY MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT NECESSARY TO FULLY COMPLETE THE WORK SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR.
27. PROVIDE GFCI CIRCUIT BREAKERS SERVING RECEPTACLES PROVIDING POWER TO DRINKING FOUNTAINS, REFRIGERATORS, VENDING MACHINES, DISPOSALS, AND WASHING MACHINES.
28. CAREFULLY REVIEW THE ENTIRE DRAWING PACKAGE PRIOR TO PROVIDING BID, INCLUDING THE ARCHITECTURAL AND MECHANICAL DRAWINGS. NOT REVIEWING THE ENTIRE SET IS NOT ACCEPTABLE.
29 PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
30 PROVIDE WEATHERPROOF, NEMA 3R RATED EQUIPMENT FOR ALL EXTERIOR APPLICATIONS.

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UTILITY CONDUIT SCHEDULE

EUGF	EXISTING UNDERGROUND FIBER
EUGP	EXISTING UNDERGROUND POWER
EUGS	EXISTING UNDERGROUND SPARE
NUGF	NEW UNDERGROUND FIBER
NUGFA	NEW UNDERGROUND FIRE ALARM
NUGS	NEW UNDERGROUND SPARE
EOHP	EXISTING OVERHEAD POWER
TEL	NEW UNDERGROUND CITY FIBER
CSL	CITY STREET LIGHTING

ABBREVIATIONS INDEX

ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION
#	NUMBER	MH	MANHOLE
AC	ALTERNATING CURRENT	MIC	MICROPHONE
A.F.F.	ABOVE FINISH FLOOR	MIN	MINIMUM
AIC	AMPS INTERRUPTING CAPACITY	MTG	MOUNTING
AM	AMPS METER	MTR	MOTOR
AMP	AMPERE	N/A	NOT APPLICABLE
ANN	ANNUNCIATOR	NC	NORMALLY CLOSED
ATS	AUTOMATIC TRANSFER SWITCH	NEC	NATIONAL ELECTRICAL CODE
AUX	AUXILIARY	NEMA	NATIONAL ELECT. MANUFAC. ASSOC.
AWG	AMERICAN WIRE GAUGE	NFPA	NATIONAL FIRE PROTECTION ASSOC.
BC	BARE COPPER	N.I.C.	NOT IN CONTRACT
BFG	BELOW FINISH GRADE	NO	NORMALLY OPENED
C	CONDUIT	NTS	NOT TO SCALE
CAB	CABINET	OS & Y	OUTSIDE SCREW & YOKE
CATB	COMMUNITY ANTENNA TELEVISION	PB	PUSHBUTTON
CATV	CABLE TELEVISION	PF	POWER FACTOR
CKT	CIRCUIT	PFR	PHASE FAILURE RELAY
CLG	CEILING	PNL	PANEL
CNTR	CONTRACTOR	PT	POTENTIAL TRANSFORMER
C.O.	CONDUIT ONLY	PVC	POLYVINYL CHLORIDE CONDUIT
CRT	COMPUTER TERMINAL	(R)	RELOCATE
CT	CURRENT TRANSFORMER	RECEP	RECEPTACLE
CU	COPPER	REQ	REQUIREMENT
CW	COMPLETE WITH	RLA	RATED LOAD AMPS
DB	DECIBEL	RMP	ROCKY MOUNTAIN POWER
DC	DIRECT CURRENT	RMS	ROOT MEAN SQUARE
DWG	DRAWING	SE	SERVICE ENTRANCE
(E)	EXISTING	SPEC	SPECIFICATIONS
EC	EMPTY CONDUIT	SPKR	SPEAKER
EG	EMERGENCY GENERATOR	SS	SELECTOR SWITCH
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
EX	EXPLOSION PROOF	SWBD	SWITCHBOARD
FACP	FIRE ALARM CONTROL PANEL	SWGR	SWITCHGEAR
FC	FOOT CANDLE	TTB	TELEPHONE TERMINAL BOARD
FT	FOOT	TTC	TELEPHONE TERMINAL CABINET
GFI	GROUND FAULT INTERRUPTER	TV	TELEVISION
GND	GROUND	TYP	TYPICAL
GRC	GALVANIZED RIGID CONDUIT	UG	UNDERGROUND
HP	HORSE POWER	UPS	UNINTERRUPTED POWER SUPPLY
HZ	HERTZ	V	VOLT (KV-KILOVOLT)
IFC	INTERNATIONAL FIRE CODE	VA/R	VOLT-AMPS/REACTIVE
IG	ISOLATED GROUND	VM	VOLT METER
IMC	INTERMEDIATE METALLIC CONDUIT	W	WATTS
IN	INCH	W/	WITH
J-BOX	JUNCTION BOX	WH	WATTHOUR METER
KV	KILOVOLT	W/O	WITHOUT
KVA	KILOVOLT AMPERES	WP	WEATHERPROOF
KVAR	KILOVARS	XFMR	TRANSFORMER
KW	KILOWATT	XFMR SW	TRANSFER SWITCH
LRA	LOCKED ROTOR AMPS	XP	EXPLOSION PROOF
LTG	LIGHTING	1P	SINGLE-PHASE
MNF	MANUFACTURER	2P	TWO-POLE
MAX	MAXIMUM	3P	THREE-POLE
MB	MAIN BUS	4P	FOUR-POLE
MCC	MOTOR CONTROL CENTER	∅	PHASE
MCM	1000 CIRCULAR MILLS		

CONTROL ROUGH-IN NOTES

1. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. REFER TO DIVISION 21-23 DRAWINGS AND COORDINATE WITH CONTROLS CONTRACTOR TO VERIFY EXACT LOCATION OF ALL THERMOSTATS. PROVIDE ELECTRICAL BOXES, METAL CONDUIT, TUBING, AND FITTINGS OF TYPES, GRADES, SIZES, AND WEIGHTS (WALL THICKNESS) AS INDICATED; WITH MINIMUM TRADE SIZE OF 3/4". SURFACE MOUNTED RACEWAY IN FINISH AREAS IS NOT ALLOWED.
2. ELECTRICAL CONTRACTOR SHALL VERIFY ALL CONDUIT AND ROUGH-IN REQUIREMENTS PRIOR TO ANY ROUGH-IN OF THERMOSTAT PATHWAYS, AND ELECTRICAL CONTRACTOR SHALL HAVE THE FINAL RESPONSIBILITY FOR PROPERLY COORDINATING THE ELECTRICAL WORK, INCLUDING THE EXACT LOCATION OF THE THERMOSTATS. OBTAIN SUBMITTALS OF ALL WALL MOUNTED THERMOSTATS FROM CONTROLS CONTRACTOR AND DIVISION 21 THROUGH 23 CONTRACTOR(S).
3. NOTIFY ENGINEER OF ANY MODIFICATIONS BETWEEN CONTRACT DOCUMENTS AND SUBMITTALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPLIANCE WITH THE DOCUMENTS.
4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL THEIR OWN BLOCKOUTS AND COORDINATING THEIR SPACE OF A SHARED BLOCKOUT.
5. COORDINATE ALL INTERFACES BETWEEN MECHANICAL/TEMPERATURE CONTROLS AND ELECTRICAL/COMMUNICATIONS/SECURITY DIVISIONS BEFORE SUBMITTING ANY EQUIPMENT FOR REVIEW OR BEGINNING INSTALLATION.

TELEPHONE/DATA LEGEND

DIVISION 26000, 27, AND 28 ELECTRICAL CONTRACTORS ARE RESPONSIBLE TO READ, UNDERSTAND AND ABIDE TO THE SPECIFICATIONS OF DIVISION 27 1500 CONTRACTOR'S RESPONSIBILITY AND THE SCOPE OF THE WORK THAT IS BEING REQUIRED. REFER TO DRAWINGS AND SPECIFICATIONS FOR ANY ADDITIONAL REQUIRED DROPS AND FURTHER INFORMATION.

X — CEILING MOUNTED OUTLET: REFER TO LETTER FOR CABLE QUANTITY

WAP — WIRELESS ACCESS POINT: (2) CAT6A DATA CABLES WITH 2 PORT SURFACE BOX (15' COIL ABOVE CEILING) (OFCI).

FB (FT) — FLOOR BOX: REFER TO DESCRIPTION FOR # CABLES REQUIRED AT EACH FLOOR BOX

(FP) — FLAT PANEL DISPLAY BOX: PROVIDE (2) DATA DROP UNLESS NOTED OTHERWISE.

IP CAMERA: 1 DATA (REFER TO SYSTEMS SHEETS)

INT — ACCESS CONTROL SYSTEM TWO-WAY AUDIO/VIDEO INTERCOM DOOR STATION. (REFER TO THE MANUFACTURES (AIPHONE) SPECIFICATIONS FOR THE NECESSARY CABLING).

(FP) (L-X) — PROJECTOR CEILING MOUNT AND RECESSED EQUIPMENT RACK LOCATION. REFER TO ET SERIES SHEETS FOR LOCATION OF PROJECTOR AND/OR EQUIPMENT RACK. PROVIDE SURGE PROTECTED OUTLET AND DATA AS INDICATED. (# CABLES PER "X" e.g. (L-1) = 1 DATA)

IC4 Z-I0 — AV IP INTERCOM SPEAKER: 1 DATA (REFER TO INTERCOM TA400 SHEETS)

CSA — IP CLASSROOM SOUND AMPLIFICATOIN SYSTEM: 1 DATA (REFER TO AV TA300 SHEETS)

1. ALL CABLE PATHWAYS (CONDUIT, CABLE BASKET/TRAY ETC.) TO BE INSTALLED BY DIVISION 26000 CONTRACTORS WHEN INDICATED ON THE DRAWINGS AND/OR IN THIS SPECIFICATION. CABLE TRAY IS NOT TO BE ANY LESS THAN 18" WIDE AND 4" HIGH THROUGH MAIN CORRIDOR PATHWAYS. CONTRACTORS TO INSTALL A 4-11/16" SQUARE DEEP BOX WITH A SINGLE 1" CONDUIT ENTRY TO EACH NETWORK DROP
2. PROVIDE A 10' SERVICE LOOP TO EACH DATA DROP, IP SURVEILLANCE, AND WAP LOCATION.
3. ANY PATHWAYS IN OR UNDER THE SLAB OR ANY OTHER POTENTIALLY WET LOCATIONS SHALL USE THE APPROPRIATE OSP CABLING AND CONDUIT SHALL RUN TO THE NEAREST NETWORK CLOSET WHERE CABLES WILL BE TERMINATED WITHIN 50' OF EXITING THE CONDUIT. ANY PIPING OF THESE LOCATIONS TO THE CABLE TRAY SO THAT OSP CABLES WOULD RUN FREELY THROUGH A PLENUM AIR SPACE IS PROHIBITED.

ROOFING GENERAL NOTES

1. CONTRACTOR SHALL NOT INSTALL ELECTRICAL CONDUIT(S) THROUGH THE NEW MECHANICAL CURB AND/OR DUCTWORK. LOCATE ELECTRICAL CONDUITS A MINIMUM OF 12" AWAY FROM MECHANICAL CURB ALONG WITH MAINTAINING A MINIMUM OF 12" BETWEEN ANY CONDUIT AND ANY OTHER OBSTACLE. CONDUITS MUST EXTEND 24" FROM DECK WITH 16"-18" OF CONDUIT PROTRUDING FROM FINISHED ROOF LINE. PROVIDE LIQUID TIGHT CONDUIT FROM CONDUIT STUB TO FINAL CONNECTION AT EQUIPMENT. COORDINATE ANY AND ALL OTHER REQUIRED ROOFING REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.

SYMBOL SCHEDULE

NOTES:

1. SEE FIXTURE SCHEDULE FOR TYPE, MOUNTING AND WATTAGE.
2. HEIGHT MEASURED TO CENTER LINE OF THE BOX FROM THE FINISHED FLOOR.
3. REFER TO DRAWINGS FOR DIRECTIONAL ARROWS.
4. SUBSCRIPT INDICATES FIXTURES TO BE CONTROLLED.
5. NEMA TYPE "ND" NON-FUSED UNLESS NOTED "F" (FUSED), USE "HD" 480 V.
6. HEIGHT MEASURED TO TOP OF THE BOX FROM FINISHED FLOOR.
7. PROVIDE H.O.A. AND S.S. PUSHBUTTONS AS REQUIRED.
8. DOUBLE ARROWS INDICATES A DOUBLE FACE UNIT.
9. DEVICES NOTED WITH AN 'A' INDICATE TO COORDINATE WITH MILLWORK SHOP DRAWINGS AND ELEVATIONS FOR HEIGHT.
10. SUBSCRIPT INDICATES NEMA CONFIGURATION.
11. SOLID BOX AROUND DEVICE INDICATES INSTALLED IN FLOOR. DASHED BOX AROUND DEVICE INDICATES INSTALLED IN CEILING.
12. COORDINATE WITH DOOR HARDWARE SUPPLIER.
13. FOR WATER COOLER LOCATION, SEE DIAGRAM R002. FOR ALL OTHER LOCATIONS, MOUNT AT +16" TO BOTTOM OF BOX FROM FINISHED FLOOR, OR AS NOTED.
14. ARROWS SHOWN ON DEVICE INDICATE SENSOR AIMING DIRECTION.
15. CAMERA NUMBERS ARE SHOWN INSIDE THE CAMERA SYMBOL. CAMERA TYPES ARE INDICATED IN TAG.
16. MOUNT ON TRACK OF OVERHEAD DOOR, 6" FROM TOP OF DOOR, UNLESS OVERHEAD DOOR IS A ROLL UP DOOR, THEN MOUNT PER MANUFACTURER'S INSTRUCTIONS.
17. INSTALL DEVICES PER MANUFACTUER'S INSTALLATION INSTRUCTIONS.
18. DASHED LINE INDICATES EQUIPMENT CLEARANCES. ARROW INDICATES FRONT OF RACK.
19. SPEAKER TO BE MOUNTED IN HORIZONTAL POSITION.
20. MOUNTING HEIGHT IS TO BOTTOM OF DISPLAY.

*TYPICAL SYMBOL SCHEDULE. SOME SYMBOLS MAY NOT BE USED ON THIS SET OF DRAWINGS.

STANDARD MOUNTING HEIGHT UNLESS OTHERWISE NOTED ON PLANS

SYMBOL	DESCRIPTION	MOUNTING HEIGHT	NOTES
GENERAL			
	CONDUIT RUN CONCEALED IN WALL OR CEILING		
	CONDUIT RUN CONCEALED IN FLOOR OR GROUND		
	CONDUIT UP		
	CONDUIT DOWN		
	CONDUIT STUB LOCATION	CAP CONDUIT	
	CONDUIT / CIRCUIT CONTINUATION		
X	DEVICE / EQUIPMENT (TEXT DESIGNATES TYPE) SEE SCHEDULE		
X	DEVICE / EQUIPMENT (TEXT DESIGNATES TYPE) SEE SCHEDULE / LEGEND		
LIGHTING			
	CEILING LIGHT FIXTURE	CEILING	1.
	WALL LIGHT FIXTURE	AS NOTED	1.
	RECESSED DOWNLIGHT FIXTURE	CEILING	1.
	RECESSED WALL-WASH DOWNLIGHT FIXTURE	CEILING	1.
G	LIGHT FIXTURE	AS NOTED	1.
EG	EGRESS LIGHT FIXTURE	AS NOTED	1.
	AREA LIGHT POLE AND FIXTURE	CONCRETE BASE	1. SEE DIAGRAM
	BOLLARD	CONCRETE BASE	1.
	STEP LIGHT FIXTURE	AS NOTED	1.
	IN-GRADE LIGHT FIXTURE	CONCRETE BASE	1.
	FLOOD OR TRACK FIXTURE	AS NOTED	1.
	CEILING / WALL MOUNTED EXIT LIGHT	CEILING/ AS NOTED	1. 3. 8.
	EMERGENCY LIGHT FIXTURE	AS NOTED	1.
	COMBO EXIT / EMERGENCY LIGHT FIXTURE	AS NOTED	1.
PP	POWER PACK	ABOVE CEILING	SEE DIAGRAM, SPEC.
RC X	DIGITAL ROOM CONTROLLER (SUBSCRIPT INDICATES NUMBER OF RELAYS)	ABOVE CEILING	SEE DIAGRAM, SPEC.
POWER - ALL 120V RECEPTACLES SHALL BE CONSIDERED TAMPERPROOF			
	DUPLEX RECEPTACLE — UPPER OUTLET SWITCH CONTROLLED	+18" OR AS NOTED	2. 9.
	SIMPLEX RECEPTACLE	+18" OR AS NOTED	2. 9.
	DUPLEX RECEPTACLE	+18" OR AS NOTED	2. 9. 11.
U	DUPLEX RECEPTACLE WITH USB OUTLET	+18" OR AS NOTED	2. 9.
C	CONTROLLED DUPLEX RECEPTACLE	+18" OR AS NOTED	2. 9.
A	DUPLEX RECEPTACLE		9.
G	5mA GFCI CIRCUIT BREAKER PROTECTED RECEPTACLE		13.
WP	WEATHERPROOF RECEPTACLE	+24" OR AS NOTED	2. 9.
IG	ISOLATED GROUND RECEPTACLE	+18" OR AS NOTED	2. 9.
	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE	+18" OR AS NOTED	2. 9.
	DUPLEX RECEPTACLE EMERGENCY POWER (RED)	+18" OR AS NOTED	2. 9. 11.
	FOURPLEX RECEPTACLE	+18" OR AS NOTED	2. 9. 11.
	GROUND FAULT INTERRUPTER FOURPLEX RECEPT	+18" OR AS NOTED	2. 9.
	FOURPLEX RECEPTACLE EMERGENCY POWER (RED)	+18" OR AS NOTED	2. 9. 11.
	CONTROLLED FOURPLEX RECEPTACLE	+18" OR AS NOTED	2. 9.
	TVSS PROTECTED RECEPTACLE	+18" OR AS NOTED	2. 9.
	SPECIAL PURPOSE OUTLET	+18" OR AS NOTED	2. 10. W/ CAP.
	CORD DROP	SEE DIAGRAM	
	CORD REEL	SEE DIAGRAM	
	TOMBSTONE RECEPTACLE		
T	THERMOSTAT		
TELECOMMUNICATIONS			
W	WALL PHONE	+60" OR AS NOTED	2.
	DATA OUTLET, ONE CABLE	+18" OR AS NOTED	2. 9. 11.
	DATA OUTLET, TWO CABLES	+18" OR AS NOTED	2. 9. 11.
	DATA OUTLET, THREE CABLES	+18" OR AS NOTED	2. 9. 11.
X	DATA OUTLET, "X" INDICATES QUANTITY	+18" OR AS NOTED	2. 9. 11.
	DATA OUTLET, CEILING	AS NOTED	
WAP WAP	WIRELESS ACCESS POINT, TWO CABLES	WALL / CEILING	11.
	TELEVISION OUTLET	+18" OR AS NOTED	9. 11.
FIRE ALARM			
	BELL	+94"	2.
C	CHIME / STROBE	+94" / CEILING	2.
F	FIRE ALARM MANUAL STATION	+48"	2.
H	FIRE ALARM SIGNAL HORN / STROBE	+94" / CEILING	2.
S	FIRE ALARM STROBE	+94" / CEILING	2.
B	FIRE ALARM STROBE WITH BLUE COLORED LENS (CO VISUAL ALARM)	+94" / CEILING	2.
ANN	FIRE ALARM ANNUNCIATOR PANEL	+58"	2. SEE DIAGRAM
B	BEAM DETECTOR		MOUNT AS PER MFR.
MM	FIRE ALARM MONITOR MODULE		
TWZ	TWO-WAY COMMUNICATION SYSTEM CONTROL PANEL	+46"	2.
TW	TWO-WAY COMMUNICATION SYSTEM CALL STATION	+46"	2.
SECURITY			
###	IP CAMERA - SEE SCHEDULE	AS NOTED	14. 15.
DC1	SECURITY SYSTEM DOOR CONTACT	DOOR JAMB	
DC2	SECURITY SYSTEM GARAGE DOOR CONTACT	+96" OR AS NOTED	17.
DB X	DURESS PUSHBUTTON, T = TRANSMITTER, R = RECEIVER, H = HARDWIRED	AS NOTED	17.

OGDEN SCHOOL DISTRICT
FUTURE HILLCREST ELEMENTARY SCHOOL
MAIN SWITCHGEAR PROCUREMENT PACKAGE

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ABBREVIATIONS INDEX

ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION
#	NUMBER	MH	MANHOLE
AC	ALTERNATING CURRENT	MIC	MICROPHONE
A.F.F.	ABOVE FINISH FLOOR	MIN	MINIMUM
AIC	AMPS INTERRUPTING CAPACITY	MTG	MOUNTING
AM	AMPS METER	MTR	MOTOR
AMP	AMPERE	N/A	NOT APPLICABLE
ANN	ANNUNCIATOR	NC	NORMALLY CLOSED
ATS	AUTOMATIC TRANSFER SWITCH	NEC	NATIONAL ELECTRICAL CODE
AUX	AUXILIARY	NEMA	NATIONAL ELECT. MANUFAC. ASSOC.
AWG	AMERICAN WIRE GAUGE	NFPA	NATIONAL FIRE PROTECTION ASSOC.
BC	BARE COPPER	N.I.C.	NOT IN CONTRACT
BFG	BELOW FINISH GRADE	NO	NORMALLY OPENED
C	CONDUIT	NTS	NOT TO SCALE
CAB	CABINET	OS & Y	OUTSIDE SCREW & YOKE
CATB	COMMUNITY ANTENNA TELEVISION	PB	PUSHBUTTON
CATV	CABLE TELEVISION	PF	POWER FACTOR
CKT	CIRCUIT	PFR	PHASE FAILURE RELAY
CLG	CEILING	PNL	PANEL
CNTR	CONTRACTOR	PT	POTENTIAL TRANSFORMER
C.O.	CONDUIT ONLY	PVC	POLYVINYL CHLORIDE CONDUIT
CRT	COMPUTER TERMINAL	(R)	RELOCATE
CT	CURRENT TRANSFORMER	RECEP	RECEPTACLE
CU	COPPER	REQ	REQUIREMENT
C/W	COMPLETE WITH	RLA	RATED LOAD AMPS
DB	DECIBEL	RMP	ROCKY MOUNTAIN POWER
DC	DIRECT CURRENT	RMS	ROOT MEAN SQUARE
DWG	DRAWING	SE	SERVICE ENTRANCE
(E)	EXISTING	SPEC	SPECIFICATIONS
EC	EMPTY CONDUIT	SPKR	SPEAKER
EG	EMERGENCY GENERATOR	SS	SELECTOR SWITCH
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
EX	EXPLOSION PROOF	SWBD	SWITCHBOARD
FACP	FIRE ALARM CONTROL PANEL	SWGR	SWITCHGEAR
FC	FOOT CANDLE	TTB	TELEPHONE TERMINAL BOARD
FT	FOOT	TTC	TELEPHONE TERMINAL CABINET
GFI	GROUND FAULT INTERRUPTER	TV	TELEVISION
GND	GROUND	TYP	TYPICAL
GRC	GALVANIZED RIGID CONDUIT	UG	UNDERGROUND
HP	HORSE POWER	UPS	UNINTERRUPTED POWER SUPPLY
HZ	HERTZ	V	VOLT (KV-KILOVOLT)
IFC	INTERNATIONAL FIRE CODE	VA/R	VOLT-AMPS/REACTIVE
IG	ISOLATED GROUND	VM	VOLT METER
IMC	INTERMEDIATE METALLIC CONDUIT	W	WATTS
IN	INCH	W/	WITH
J-BOX	JUNCTION BOX	WH	WATTHOUR METER
KV	KILOVOLT	W/O	WITHOUT
KVA	KILOVOLT AMPERES	WP	WEATHERPROOF
KVAR	KILOVARS	XFMR	TRANSFORMER
KW	KILOWATT	XFMR SW	TRANSFER SWITCH
LRA	LOCKED ROTOR AMPS	XP	EXPLOSION PROOF
LTG	LIGHTING	1P	SINGLE-PHASE
MNF	MANUFACTURER	2P	TWO-POLE
MAX	MAXIMUM	3P	THREE-POLE
MB	MAIN BUS	4P	FOUR-POLE
MCC	MOTOR CONTROL CENTER	∅	PHASE
MCM	1000 CIRCULAR MILLS		

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 4

ELECTRICAL SYMBOLS AND NOTES

E001-BP4

9/15/2023 12:51:58 PM

LIGHT FIXTURE SCHEDULE

LIGHT FIXTURE ABBREVIATION SCHEDULE — PROJECT MANAGER: ERIC SKINKIS

A.F.F.	ABOVE FINISH FLOOR	SCBA	STANDARD PAINTED COLOR AS SELECTED BY THE ARCHITECT
WALL@CLG	WALL MOUNT AT CORNER OF WALL AND CEILING	CFBA	CUSTOM FINISH AS SELECTED BY THE ARCHITECT
CCBA	CUSTOM PAINTED COLOR AS SELECTED BY THE ARCHITECT	SFBA	STANDARD FINISH AS SELECTED BY THE ARCHITECT

LIGHT FIXTURE GENERAL NOTES

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF LIGHT FIXTURES AND, CONFIRM CEILING TYPES WITH LIGHT FIXTURE TRIMS. BRING ALL DISCREPANCIES OF LOCATIONS AND QUANTITIES TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO BIDDING.
2. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS AND LOCATIONS OF LIGHT FIXTURES. BRING ALL DISCREPENCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
3. REFER TO THE SPECIFICATIONS FOR OTHER LIGHT FIXTURE, FUSING, LED DRIVERS, AND LAMP REQUIREMENTS AND ACCEPTABLE MANUFACTURERS.
4. CONFIRM AVAILABLE MOUNTING DEPTHS OF ALL LIGHT FIXTURES AND COMPARE WITH DEPTHS SHOWN ON SHOP DRAWINGS. BRING ALL POTENTIAL CONFLICT AREAS TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO RELEASE.
5. REFER TO LIGHTING PLANS FOR ALL LINEAR FIXTURE LENGTHS. THE CATALOG NUMBER IS BASED ON THE FIXTURE SPECIFIED AND MAY NOT REFLECT THE QUANTITY OR OVERALL LENGTH OF LINEAR FIXTURES REQUIRED. CONTRACTOR TO NOTE THAT VARIOUS FIXTURE LENGTHS MAY BE REQUIRED TO ACHIEVE THE OVERALL RUN LENGTH.
6. REFER TO LIGHTING PLANS FOR ALL UNDERCABINET FIXTURE LENGTHS. THE CATALOG NUMBER IS BASED ON THE FIXTURE SPECIFIED AND MAY NOT REFLECT THE QUANTITY OR OVERALL LENGTH OF THE UNDERCABINET FIXTURES REQUIRED. CONTRACTOR TO NOTE THAT VARIOUS FIXTURE LENGTHS MAY BE REQUIRED TO ACHIEVE THE OVERALL RUN LENGTH OR TO FIT WITHIN THE MILLWORK. COORDINATE FIXTURE LAYOUT WITH MILLWORK SHOP DRAWINGS PRIOR TO LIGHTING SUBMITTALS.
7. WHEN A CONTRADICTION EXISTS BETWEEN A SPECIFIC MODEL NUMBER AND THE DESCRIPTION, NOTIFY THE ELECTRICAL ENGINEER AND/OR LIGHTING DESIGNER.
8. PRIOR APPROVALS ARE REQUIRED BEFORE BIDDING THE PROJECT AND SHALL BE SUBMITTED TO THE ELECTRICAL ENGINEER'S OFFICE AT LEAST (8) EIGHT WORKING DAYS BEFORE THE BID. PRIOR APPROVALS RECEIVED AFTER THIS TIME PERIOD SHALL BE...
9. REFER TO SPECIFICATIONS 20 0500, 26 5100 & 26 5600 (16001, 16510 & 16551).
10. VALUE ENGINEERING CONDUCTED WITHOUT THE DESIGN TEAM IE; ARCHITECT, ENGINEER & LIGHTING CONSULTANT/DESIGNER WILL NOT BE ALLOWED, REVIEWED OR APPROVED.

TYPE	DESCRIPTION	MFR.	CATALOG #	VOLTS	TOTAL WATTS	LAMP TYPE	DELIVERED LUMENS	COLOR TEMP	CRI
A55	2'X4' HIGH EFFICIENT LED ARCHITECTURALLY STYLED RECESSED LUMINAIRE; RIBBED FROSTED CENTER LENS; LOW PROFILE BODY; EASY ACCESS TO COMPONENTS; INCLUDE TRIM RING TO MATCH INTEGRAL SENSOR FIXTURES 203,000 HOUR (L70); 0-10 DIMMING; 1% DIMMING; 5 YR. WARRANTY. DLC PREMIUM LISTED	LITHONIA	2BLT4-55HE-ADPT-GZ1-LP840	277 V	39 VA	LED	5,500	4000 K	80+
A65	2'X4' HIGH EFFICIENT LED ARCHITECTURALLY STYLED RECESSED LUMINAIRE; RIBBED FROSTED CENTER LENS; LOW PROFILE BODY; EASY ACCESS TO COMPONENTS; INCLUDE TRIM RING TO MATCH INTEGRAL SENSOR FIXTURES 203,000 HOUR (L70); 0-10 DIMMING; 1% DIMMING; 5 YR. WARRANTY. DLC PREMIUM LISTED	LITHONIA	2BLT4-65HE-ADPT-GZ1-LP840	277 V	45 VA	LED	6,500	4000 K	80+
A75	2'X4' HIGH EFFICIENT LED ARCHITECTURALLY STYLED RECESSED LUMINAIRE; RIBBED FROSTED CENTER LENS; LOW PROFILE BODY; EASY ACCESS TO COMPONENTS; INCLUDE TRIM RING TO MATCH INTEGRAL SENSOR FIXTURES 203,000 HOUR (L70); 0-10 DIMMING; 1% DIMMING; 5 YR. WARRANTY. DLC PREMIUM LISTED	LITHONIA	2BLT4-75HE-ADPT-GZ1-LP840	277 V	45 VA	LED	7,500	4000 K	80+
B34	2'X2' HIGH EFFICIENT LED ARCHITECTURALLY STYLED RECESSED LUMINAIRE; RIBBED FROSTED CENTER LENS; LOW PROFILE BODY; EASY ACCESS TO COMPONENTS; INCLUDE TRIM RING TO MATCH INTEGRAL SENSOR FIXTURES 203,000 HOUR (L70); 0-10 DIMMING; 1% DIMMING; 5 YR. WARRANTY. DLC PREMIUM LISTED	LITHONIA	2BLT2-34HE-ADPT-GZ1-LP840			3400 LUMEN LED, 4000K CCT, 80+ CRI (WATTS = 25)	3,400	4000 K	80+
B44	2'X2' HIGH EFFICIENT LED ARCHITECTURALLY STYLED RECESSED LUMINAIRE; RIBBED FROSTED CENTER LENS; LOW PROFILE BODY; EASY ACCESS TO COMPONENTS; INCLUDE TRIM RING TO MATCH INTEGRAL SENSOR FIXTURES 203,000 HOUR (L70); 0-10 DIMMING; 1% DIMMING; 5 YR. WARRANTY. DLC PREMIUM LISTED	LITHONIA	2BLT2-44HE-ADPT-GZ1-LP840			4400 LUMEN LED, 4000K CCT, 80+ CRI	4,400	4000 K	80+
D4A	4" LED RECESSED ROUND DOWNLIGHT; ADJUSTABLE 0-45° WITH 360° ROTATION, FRAME + TRIM KIT; 50 DEG. DIFFUSED WITH CLEAR LENS; 50,000 HOUR (L70); 10 YR WARRANTY; 0-10 DIMMING, PROVIDE 0-10 DIMMING SWITCH	CONTECH	R4ANCS-40k-277-D-F-XX	277 V	37 VA	LED	2,600	4000 K	80+
D4GL	4" LED RECESSED ROUND DOWNLIGHT; FRAME + TRIM KIT; XICATO LED TECH.; 40° HIGH EFFICIENCY DIFFUSED LENS; CIRQUE RING 5/8" DROP; WET-LISTED; 50,000 HOUR (L70); 5 YR WARRANTY; 0-10 DIMMING	ALPHABET LIGHTING	NU4-RD-XTM19-20LM-40K-83-CQR-HE40-UNV-DIM10-NC-SCBA	277 V	13 VA	LED	700	4000 K	80+
DC	SURFACE MOUNTED DISPLAY CABINET LINEAR LED LUMINAIRE; DIFFUSED LENS; WIDE 109 DEGREE OPTIC; REMOTE DRIVER; 50,000 HOUR (L70); 5 YR. WARRANTY; 0-10 DIMMING; FIELD MEASURE CABINET LENGTH BEFORE ORDERING; CONTRACTOR TO PROVIDE ALL POWER SUPPLIES, CONNECTORS, FEEDS, MOUNTING HARDWARE, DIMMING SWITCHES, ETC. REQUIRED FOR A COMPLETE AND WORKING SYSTEM; COORDINATE ROUGH-IN WITH DISPLAY CASE MANUFACTURER/INSTALLER FOR SURFACE MOUNTING DETAIL AND PROVIDE ALL JUMPERS AS NEEDED FOR DIVIDED CASE SECTIONS. MAGNETIC CLIPS NOT ACCEPTABLE	Q-TRAN	iQA-THIN-SCBA-DF-109"-SST-#FT/SEE PLANS)+iQ20-35-#FT-95-3-D+DRIVER/PS	277 V	5 VA	427lm/ft LED, 3500K CCT, 95+ CRI	2,400	3500 K	95+
EH	4' LED WALL MOUNTED GASKETED LINEAR STRIPLIGHT; RUGGED ENCLOSED FROSTED ACRYLIC LENS; 60,000 HOUR (L80); 5YR WARRANTY; PROVIDE A TOTAL OF (3) FIXTURES MOUNTED THROUGHOUT ELEVATOR SHAFT; DLC PREMIUM LISTED	COLUMBIA LIGHTING	LXEM4-40HL-RFA-E-U-GLR-SSL	277 V	48 VA	LED	6,222	4000 K	80+
EZT24	2' 3-SIDED DIFFUSING LENS T-GRID MOUNTED LED LUMINAIRE; SIMPLE T-GRID CLIP MOUNTING MECHANISM - MOUNT TO THE BOTTOM THE T-GRID; LENS: EXTRUDED VOLUMETRIC DIFFUSION LENS; END CAP: DIE-CAST ALUMINUM; FIXTURE HOUSING: EXTRUDED ALUMINUM, POWDER COATED; SYMMETRIC LAMBERTIAN DISTRIBUTION; 5 YR WARRANTY; 0-10 DIMMING	ARON LIGHTING	EZT1-FT15-2-400-B1-40K8-UNV-DM-W	277 V	12 VA	LED	800	4000 K	80+
EZT25	2' 3-SIDED DIFFUSING LENS T-GRID MOUNTED LED LUMINAIRE; SIMPLE T-GRID CLIP MOUNTING MECHANISM - MOUNT TO THE BOTTOM THE T-GRID; LENS: EXTRUDED VOLUMETRIC DIFFUSION LENS; END CAP: DIE-CAST ALUMINUM; FIXTURE HOUSING: EXTRUDED ALUMINUM, POWDER COATED; SYMMETRIC LAMBERTIAN DISTRIBUTION; 5 YR WARRANTY; 0-10 DIMMING	ARON LIGHTING	EZT1-FT15-2-500-B1-40K8-UNV-DM-W	277 V	16 VA	LED	1,000	4000 K	80+
EZT44	4' 3-SIDED DIFFUSING LENS T-GRID MOUNTED LED LUMINAIRE; SIMPLE T-GRID CLIP MOUNTING MECHANISM - MOUNT TO THE BOTTOM THE T-GRID; LENS: EXTRUDED VOLUMETRIC DIFFUSION LENS; END CAP: DIE-CAST ALUMINUM; FIXTURE HOUSING: EXTRUDED ALUMINUM, POWDER COATED; SYMMETRIC LAMBERTIAN DISTRIBUTION; 5 YR WARRANTY; 0-10 DIMMING	ARON LIGHTING	EZT1-FT15-4-400-B1-40K8-UNV-DM-W	277 V	24 VA	LED	1,600	4000 K	80+
EZT45	4' 3-SIDED DIFFUSING LENS T-GRID MOUNTED LED LUMINAIRE; SIMPLE T-GRID CLIP MOUNTING MECHANISM - MOUNT TO THE BOTTOM THE T-GRID; LENS: EXTRUDED VOLUMETRIC DIFFUSION LENS; END CAP: DIE-CAST ALUMINUM; FIXTURE HOUSING: EXTRUDED ALUMINUM, POWDER COATED; SYMMETRIC LAMBERTIAN DISTRIBUTION; 5 YR WARRANTY; 0-10 DIMMING	ARON LIGHTING	EZT1-FT15-4-500-B1-40K8-UNV-DM-W	277 V	32 VA	LED	2,000	4000 K	80+
G	12"x48" HIGH ABUSE LED SURFACE MOUNTED FIXTURE; MARINE GRADE ALUMINUM; HIGH IMPACT PEARLESCENT POLYCARBONATE LENS; 175,000 HOUR (L70); 5 YR WARRANTY; 0-10 DIMMING; VANDAL RESISTANT TORX FASTENERS; DLC PREMIUM LISTED	KENALL LIGHTING	MLHA12-48-R-SCBA-PP-45L40K-DCC-1-DV-9500	277 V	49 VA	5,345 LUMEN LED, 4000K CCT, 80+ CRI	<varies>	<varies>	80+
HB1	HIGH EFFICIENT HIGH BAY LED LUMINAIRE; DIE-CAST ALUMINUM HOUSING; PRECISION 120 DEGREE BEAM ANGLE; DIFFUSED LENS FOR GLARE REDUCTION; IMPACT RESISTANT LENS WITH WIREGUARD; WHITE HOUSING; 5 YR WARRANTY; 0-10 DIMMING; 1% DIMMING; 369,000 HOUR (L70); WITH INTEGRAL OCCUPANCY/DAYLIGHT SENSOR; FIELD COORDINATE QUANTITY OF SURFACE MOUNT AND AIRCRAFT CABLE MOUNT KITS.SURFACE MOUNT TO BOTTOM OF TRUSS; PENDANT MOUNT FLUSH WITH BOTTOM OF FIXTURES MOUNTED TO TRUSS	CURRENT	ABC1-0-30-48-1D-QV-XX-XX-X-W-93077600G	277 V	190 VA	30,000 LUMEN LED, 5000K CCT, 80+ CRI			80+
K4	2'X4' HIGH PERFORMANCE FLAT PANEL LUMINAIRE; EXTRUDED ALUMINUM FRAME WITH DIFFUSED, GLARE-FREE LENS; 3" FIXTURE DEPTH; EASY TO CLEAN; 90,000 HOUR (L70); 5 YR. WARRANTY; 0-10 DIMMING; DLC PREMIUM LISTED; NSF RATED	DAY-BRITE	2FPZ-80L-840-4-DS-UNV-DIM-NSF	277 V	60 VA	LED	8,000	4000 K	80+
L2RM	2' WIDE LINEAR LED; RECESSED INTO ARCHITECTURAL CEILING GRID; BATWING HIGH EFFICIENCY LENS; FIXTURE LENS SHALL BE CONTINUOUS (NO BREAKS); BUILT TO LENGTH (SEE PLANS); 50,000 HOUR (DRIVER), 146,500 HOUR (L70); 0-10 DIMMING; 5 YR WARRANTY; CCBA WARRANTY; 0-10 DIMMING; PROVIDE ALL ASSEMBLY AND MOUNTING MATERIALS REQUIRED TO PROVIDE A RECESSED MOUNTED WITHIN WOOD SLOT PANEL CEILING SYSTEM; COORDINATE MOUNTING DETAILS WITH CEILING MANUFACTURER; CUSTOM COLOR BY ARCHITECT	PINNACLE	EV2D-BW-840HO-(SEE PLANS)-XX-U-0-10V-1-0-CCBA	277 V	7 VA	750 LUMEN/FT, 6.1W/FT, 4000K CCT, 80+ CRI	7,500	4000 K	80+
L4HD	6"X4' HIGH PERFORMANCE LED FLAT PANEL LUMINAIRE; ULTRA-THIN <2-3/8"; GLARE-FREE; NARROW ALUMINUM BEZEL; ACRYLIC LIGHT GUIDE, WHITE FROST LENS WITH SMOOTH PATTERN; SCRATCH AND IMPACT RESISTANT; RECESSED INTO INACCESSIBLE ARCHITECTURAL CEILING; DRYWALL FLANGE KIT; EASY TO CLEAN; 60,000 HOUR (L73); 5 YR. WARRANTY; 0-10 DIMMING; FIELD SELECTABLE LUMEN OUTPUT (HIGH, 4000K)	METALUX	4RBG6-SL1-UNV-L840+DF-64W-U	277 V	36 VA	4195 LUMEN LED, 4000K CCT, 80+ CRI	<varies>	<varies>	80+
L4HDO	6"X4' HIGH PERFORMANCE LED FLAT PANEL LUMINAIRE; ULTRA-THIN <2-3/8"; GLARE-FREE; NARROW ALUMINUM BEZEL; ACRYLIC LIGHT GUIDE, WHITE FROST LENS WITH SMOOTH PATTERN; SCRATCH AND IMPACT RESISTANT; RECESSED INTO INACCESSIBLE ARCHITECTURAL CEILING; DRYWALL FLANGE KIT; EASY TO CLEAN; 60,000 HOUR (L73); 5 YR. WARRANTY; 0-10 DIMMING	METALUX		277 V	38 VA	4195 LUMEN LED, 4000K CCT, 80+ CRI			
L4HPO	4" WIDE DIRECT LINEAR PENDANT LED LUMINAIRE; HIGH EFFICIENCY LENS; FIXTURE LENS SHALL BE CONTINUOUS (NO BREAKS); 0.5" LENS DROP; ONBOARD HIGH CEILING OCC AND DAYLIGHT SENSOR; BUILT TO LENGTH; VERIFY FIELD CONDITIONS; 60,000 HOUR (L80); 5 YR WARRANTY; 0-10 DIMMING; SUSPEND BETWEEN WOOD SLATE CEILING SYSTEM SO TO BE EVEN WITH CEILING PLANE	LUMENWERX	VIA4PD-HLO-0.5D-WIO-LED-80-1000LMF-40-#FT(SEE PLANS)-UNV-D1-1-CCBA-#OCS	277 V	10 VA	1000lm/ft LED, 4000K CCT, 80+ CRI	5,000	4000 K	
L4MD	6"X4' HIGH PERFORMANCE LED FLAT PANEL LUMINAIRE; ULTRA-THIN <2-3/8"; GLARE-FREE; NARROW ALUMINUM BEZEL; ACRYLIC LIGHT GUIDE, WHITE FROST LENS WITH SMOOTH PATTERN; SCRATCH AND IMPACT RESISTANT; RECESSED INTO INACCESSIBLE ARCHITECTURAL CEILING; DRYWALL FLANGE KIT; EASY TO CLEAN; 60,000 HOUR (L73); 5 YR. WARRANTY; 0-10 DIMMING; FIELD SELECTABLE LUMEN OUTPUT (MID, 4000K)	METALUX	4RBG6-SL1-UNV-L840+DF-64W-U	277 V	30 VA	3339 LUMEN LED, 4000K CCT, 80+ CRI	3,339	4000 K	80+
L8MD	6"X8' HIGH PERFORMANCE LED FLAT PANEL LUMINAIRE; ULTRA-THIN <2-3/8"; GLARE-FREE; NARROW ALUMINUM BEZEL; ACRYLIC LIGHT GUIDE, WHITE FROST LENS WITH SMOOTH PATTERN; SCRATCH AND IMPACT RESISTANT; RECESSED INTO INACCESSIBLE ARCHITECTURAL CEILING; DRYWALL FLANGE KIT; EASY TO CLEAN; 60,000 HOUR (L73); 5 YR. WARRANTY; 0-10 DIMMING; FIELD SELECTABLE LUMEN OUTPUT (MID, 4000K)	METALUX	8RBG6-SL1-UNV-L840+DF-68W-U	277 V	63 VA	LED	7,160	4000 K	80+
L8MDO	6"X8' HIGH PERFORMANCE LED FLAT PANEL LUMINAIRE; ULTRA-THIN <2-3/8"; GLARE-FREE; NARROW ALUMINUM BEZEL; ACRYLIC LIGHT GUIDE, WHITE FROST LENS WITH SMOOTH PATTERN; SCRATCH AND IMPACT RESISTANT; RECESSED INTO INACCESSIBLE ARCHITECTURAL CEILING; DRYWALL FLANGE KIT; EASY TO CLEAN; 60,000 HOUR (L73); 5 YR. WARRANTY; 0-10 DIMMING; FIELD SELECTABLE LUMEN OUTPUT (MID, 4000K); INTEGRATED OCCUPANCY SENSOR	METALUX	8RBG6-SL1-UNV-L840+DF-68W-U-WAA	277 V	63 VA	LED	7,160	4000 K	80+
L8MGO	6"X8' HIGH PERFORMANCE LED FLAT PANEL LUMINAIRE; ULTRA-THIN <2-3/8"; GLARE-FREE; NARROW ALUMINUM BEZEL; ACRYLIC LIGHT GUIDE, WHITE FROST LENS WITH SMOOTH PATTERN; SCRATCH AND IMPACT RESISTANT; RECESSED INTO ACCESSIBLE ARCHITECTURAL CEILING; DRYWALL FLANGE KIT; EASY TO CLEAN; 60,000 HOUR (L73); 5 YR. WARRANTY; 0-10 DIMMING; FIELD SELECTABLE LUMEN OUTPUT (HIGH, 4000K); INTEGRATED OCCUPANCY SENSOR	METALUX	8RBG6-SL1-UNV-L840-68W-U-WAA`	277 V	75 VA	LED	7,160	4000 K	80+
LA5R	3" WIDE DIRECT LINEAR RECESSED/SURFACE LED LUMINAIRE; HIGH PERFORMANCE; SATINE FLAT DIFFUSED LENS; FIXTURE LENS SHALL BE CONTINUOUS (NO BREAKS); BUILT TO REQUIRED LENGTH; VERIFY FIELD CONDITIONS; 61,000 HOUR (L90); 5 YR WARRANTY; 0-10 DIMMING; PROVIDE ALL ASSEMBLY AND MOUNTING MATERIALS REQUIRED TO PROVIDE A RECESSED MOUNTED WITHIN WOOD SLOT PANEL CEILING SYSTEM; COORDINATE MOUNTING DETAILS WITH CEILING MANUFACTURER; CUSTOM COLOR BY ARCHITECT	NEO-RAY	S123DS-H560D840-C10-JB-**F0-1-U-DD-F-B; 4.4 W/ft	277 V	10 VA	500lm/ft LED, 4000K CCT, 80+ CR	5,000	4000 K	80+

LIGHT FIXTURE SCHEDULE

LIGHT FIXTURE ABBREVIATION SCHEDULE — PROJECT MANAGER: ERIC SKINKIS

A.F.F.	ABOVE FINISH FLOOR	SCBA	STANDARD PAINTED COLOR AS SELECTED BY THE ARCHITECT
WALL@CLG	WALL MOUNT AT CORNER OF WALL AND CEILING	CFBA	CUSTOM FINISH AS SELECTED BY THE ARCHITECT
CCBA	CUSTOM PAINTED COLOR AS SELECTED BY THE ARCHITECT	SFBA	STANDARD FINISH AS SELECTED BY THE ARCHITECT

LIGHT FIXTURE GENERAL NOTES

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF LIGHT FIXTURES AND, CONFIRM CEILING TYPES WITH LIGHT FIXTURE TRIMS. BRING ALL DISCREPANCIES OF LOCATIONS AND QUANTITIES TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO BIDDING.
2. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS AND LOCATIONS OF LIGHT FIXTURES. BRING ALL DISCREPENCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
3. REFER TO THE SPECIFICATIONS FOR OTHER LIGHT FIXTURE, FUSING, LED DRIVERS, AND LAMP REQUIREMENTS AND ACCEPTABLE MANUFACTURERS.
4. CONFIRM AVAILABLE MOUNTING DEPTHS OF ALL LIGHT FIXTURES AND COMPARE WITH DEPTHS SHOWN ON SHOP DRAWINGS. BRING ALL POTENTIAL CONFLICT AREAS TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO RELEASE.
5. REFER TO LIGHTING PLANS FOR ALL LINEAR FIXTURE LENGTHS. THE CATALOG NUMBER IS BASED ON THE FIXTURE SPECIFIED AND MAY NOT REFLECT THE QUANTITY OR OVERALL LENGTH OF LINEAR FIXTURES REQUIRED. CONTRACTOR TO NOTE THAT VARIOUS FIXTURE LENGTHS MAY BE REQUIRED TO ACHIEVE THE OVERALL RUN LENGTH.
6. REFER TO LIGHTING PLANS FOR ALL UNDERCABINET FIXTURE LENGTHS. THE CATALOG NUMBER IS BASED ON THE FIXTURE SPECIFIED AND MAY NOT REFLECT THE QUANTITY OR OVERALL LENGTH OF THE UNDERCABINET FIXTURES REQUIRED. CONTRACTOR TO NOTE THAT VARIOUS FIXTURE LENGTHS MAY BE REQUIRED TO ACHIEVE THE OVERALL RUN LENGTH OR TO FIT WITHIN THE MILLWORK. COORDINATE FIXTURE LAYOUT WITH MILLWORK SHOP DRAWINGS PRIOR TO LIGHTING SUBMITTALS.
7. WHEN A CONTRADICTION EXISTS BETWEEN A SPECIFIC MODEL NUMBER AND THE DESCRIPTION, NOTIFY THE ELECTRICAL ENGINEER AND/OR LIGHTING DESIGNER.
8. PRIOR APPROVALS ARE REQUIRED BEFORE BIDDING THE PROJECT AND SHALL BE SUBMITTED TO THE ELECTRICAL ENGINEER'S OFFICE AT LEAST (8) EIGHT WORKING DAYS BEFORE THE BID. PRIOR APPROVALS RECEIVED AFTER THIS TIME PERIOD SHALL BE...
9. REFER TO SPECIFICATIONS 20 0500, 26 5100 & 26 5600 (16001, 16510 & 16551).
10. VALUE ENGINEERING CONDUCTED WITHOUT THE DESIGN TEAM IE; ARCHITECT, ENGINEER & LIGHTING CONSULTANT/DESIGNER WILL NOT BE ALLOWED, REVIEWED OR APPROVED.

TYPE	DESCRIPTION	MFR.	CATALOG #	VOLTS	TOTAL WATTS	LAMP TYPE	DELIVERED LUMENS	COLOR TEMP	CRI
LA7R	3" WIDE DIRECT LINEAR RECESSED/SURFACE LED LUMINAIRE; HIGH PERFORMANCE; SATINE FLAT DIFFUSED LENS; FIXTURE LENS SHALL BE CONTINUOUS (NO BREAKS); BUILT TO REQUIRED LENGTH; VERIFY FIELD CONDITIONS; 61,000 HOUR (L90); 5 YR WARRANTY; 0-10 DIMMING; PROVIDE ALL ASSEMBLY AND MOUNTING MATERIALS REQUIRED TO PROVIDE A RECESSED MOUNTED WITHIN WOOD SLOT PANEL CEILING SYSTEM; COORDINATE MOUNTING DETAILS WITH CEILING MANUFACTURER; CUSTOM COLOR BY ARCHITECT	NEO-RAY	S123DS-H560D840-C10-JB-**F0-1-U-DD-F-B; 4.4 W/ft	277 V	7 VA	750lm/ft LED, 4000K CCT, 80+ CR	5,000	4000 K	80+
LSC1	ARCHITECTURAL AND DECORATIVE LABYRINTH'S SYSTEMATIC STRUCTURE--AN INTERSECTING TUBULAR LED FRAMEWORK IN COMBINATION WITH CAST PIN CONNECTIONS-- LED CHANDELIER; 18' X 12 L X 18.75 H; ADJUSTABLE HANGING CABLE OF 2-10'; PROVIDE REMOTE DRIVER; 60,000 HOUR (L80); 5 YR WARRANTY; 0-10 DIMMING; CONTRACTOR TO SET TRIM LIMIT BASED UPON SITE REVIEW OF SPACE FOOT CANDLES; PROVIDE ALL ASSEMBLY AND MOUNTING MATERIALS REQUIRED FOR A FULL INSTALLATION; COORDINATE EXACT CEILING SYSTEM AND SUSPENSION HEIGHT WITH ARCHITECT	SONNEMAN	(6)2105.25-40K-MVOLT-010V			40,000 LUMEN LED, 4000K CCT, 80+ CRI (WATTS = 672	40,000	4000 K	80+
LSC2	ARCHITECTURAL AND DECORATIVE LABYRINTH'S SYSTEMATIC STRUCTURE--AN INTERSECTING TUBULAR LED FRAMEWORK IN COMBINATION WITH CAST PIN CONNECTIONS-- LED CHANDELIER; 20' X 6 L X 18.75 H; ADJUSTABLE HANGING CABLE OF 2-10'; PROVIDE REMOTE DRIVER; 60,000 HOUR (L80); 5 YR WARRANTY; 0-10 DIMMING; CONTRACTOR TO SET TRIM LIMIT BASED UPON SITE REVIEW OF SPACE FOOT CANDLES; PROVIDE ALL ASSEMBLY AND MOUNTING MATERIALS REQUIRED FOR A FULL INSTALLATION; COORDINATE EXACT CEILING SYSTEM AND SUSPENSION HEIGHT WITH ARCHITECT	SONNEMAN	(3)2105.25-40K-MVOLT-010V			31,500 LUMEN LED, 4000K CCT, 80+ CRI (WATTS = 336)	31,500	4000 K	80+
LSC3	ARCHITECTURAL AND DECORATIVE LABYRINTH'S SYSTEMATIC STRUCTURE--AN INTERSECTING TUBULAR LED FRAMEWORK IN COMBINATION WITH CAST PIN CONNECTIONS-- LED CHANDELIER; 12' X 6 L X 18.75 H; ADJUSTABLE HANGING CABLE OF 2-10'; PROVIDE REMOTE DRIVER; 60,000 HOUR (L80); 5 YR WARRANTY; 0-10 DIMMING; CONTRACTOR TO SET TRIM LIMIT BASED UPON SITE REVIEW OF SPACE FOOT CANDLES; PROVIDE ALL ASSEMBLY AND MOUNTING MATERIALS REQUIRED FOR A FULL INSTALLATION; COORDINATE EXACT CEILING SYSTEM AND SUSPENSION HEIGHT WITH ARCHITECT	SONNEMAN	(2)2105.25-40K-MVOLT-010V			21,000 LUMEN LED, 4000K CCT, 80+ CRI (WATTS = 224)	21,000	4000 K	80+
OL	EXTERIOR LINEAR COVE FIXTURE; W 1.6" x H 2" x L 12'-6"; EXTRUDED ALUMINUM; LINE OF LIGHT OPTICS; IP66 EXTERIOR RATED; LINE ENTIRE LENGTH, VERIFY FIELD CONDITIONS; 60,000 HOUR (L80); 5 YR. WARRANTY; 0-10 DIMMING; MOUNTED IN MARQUEE	LUMASCAPE	LS9015 - 07D 840 63 DF 1 A S 13 ND BL 000	277 V	171 VA	923lm/ft. LED	3,600	4000 K	80
OW1P	ARCHITECTURAL WALL MOUNTED LED SITE LUMINARIE; DIE-CAST & EXTRUDED ALUMINUM HOUSING; TYPE IV DISTRIBUTION, FULL CUTOFF; IP66 RATED; 50,000 HOUR (L70); 5 YR WARRANTY; 0-10 DIMMING; INTEGRAL PHOTOCELL	H.E. WILLIAMS	VWPV-L60/L735-T4-SCBA-SDGIL-UNV-PC	277 V	70 VA	6,376 LUMEN LED, 4000K CCT, 70+ CRI	6,376	4000 K	70+
OWDO	ARCHITECTURAL DECORATIVE WALL MOUNTED LED LUMINAIRE (INSPIRED BY HUBBARDTON FORGE TWILIGHT SERIES); APPROXIMATELY 14"H X 8" W; DIE-CAST & EXTRUDED ALUMINUM HOUSING (ROUND CYLINDER WITH A RING DETAIL SITS IN FRONT OF A SQUARE BACKPLATE); TYPE III DISTRIBUTION; IP65 RATED; 50,000 HOUR (L70); 5 YR WARRANTY; 0-10V DIMMING WIRING REQUIRED; METAL FINISH, COLOR BY ARCHITECT; COORDINATE FINAL ELEVATION HEIGHT WITH ARCHITECT	CASEY ARCHITECTURAL	ESR-WS-8"-14"-2500DL-40K-T3*	277 V	25 VA	2500 LUMEN LED, 4000K CCT, 80+ CRI	2,500	4000 K	80+
OWSD	ARCHITECTURAL DECORATIVE FLUSH MOUNTED LED LUMINAIRE (INSPIRED BY HUBBARDTON FORGE TWILIGHT SERIES); APPROXIMATELY 6"H X 8" W; DIE-CAST & EXTRUDED ALUMINUM HOUSING RECTANGULAR MOUNT; A CYLINDRICAL LAMPSHADE); TYPE III DISTRIBUTION; IP65 RATED; 50,000 HOUR (L70); 5 YR WARRANTY; 0-10V DIMMING WIRING REQUIRED; METAL FINISH, COLOR BY ARCHITECT; COORDINATE FINAL ELEVATION HEIGHT WITH ARCHITECT	CASEY ARCHITECTURAL	ESR-CM-8"-8"-2000-40K*	277 V	20 VA	2000 LUMEN LED, 4000K CCT, 80+ CRI	2,000	4000 K	80+
OWUD	ARCHITECTURAL DECORATIVE WALL MOUNTED LED SITE LUMINAIRE (INSPIRED BY HUBBARDTON FORGE TWILIGHT SERIES); APPROXIMATELY 20"H X 8" W; DIE-CAST & EXTRUDED ALUMINUM HOUSING (ROUND CYLINDER WITH A RING DETAIL SITS IN FRONT OF A SQUARE BACKPLATE); 2 BEAM ANGLE, 3.5° NARROW UPDN; IP65 RATED; 50,000 HOUR (L70); 5 YR WARRANTY; 0-10V DIMMING WIRING REQUIRED; METAL FINISH, COLOR BY ARCHITECT; COORDINATE FINAL ELEVATION HEIGHT WITH ARCHITECT	CASEY ARCHITECTURAL	ESR-WS-8"-20"-1000/1000-40K-15*	277 V	20 VA	1000/1000 LUMEN LED, 4000K CCT, 80+ CRI	2,000	4000 K	80+
P2M	MEDIUM ARCHITECTURAL AREA LED SITE LUMINAIRE; DIE-CAST & EXTRUDED ALUMINUM HOUSING; TYPE II DISTRIBUTION, FULL CUTOFF; IP66 RATED; INSTALL HOUSE SIDE SHIELD WHERE INDICATED ON PLANS; DIMMING/DAWN/DUSK MOTION SENSOR, FIELD PROGRAMMABLE OUTPUT BASED ON MOTION, PROGRAMMED PER OWNERS REQUIREMENTS; 100,000 HOUR (L70); 5 YR. WARRANTY; MOUNTED ON A 20' ROUND TAPERED ALUMINUM POLE w/VIBRATION DAMPENING; MAX EPA 5.4 @ 120; LIFETIME WARRANTY ON POLE; SINGLE HEAD LUMINAIRE MOUNTING; CCBA; DLC PREMIUM LISTED	LITHONIA/GENERAL STRUCTURES INC	DSX1-P3-40K-70-T2M-MVOLT-RPA-PIRH-HS(SEE PLANS)-CCBA/CPA-2-8025-20-D1-VD-CCBA	277 V	85 VA	LED	12,000	4000 K	70+
P2S	SMALL ARCHITECTURAL AREA LED SITE LUMINAIRE; DIE-CAST & EXTRUDED ALUMINUM HOUSING; TYPE II DISTRIBUTION, FULL CUTOFF; IP66 RATED; INSTALL HOUSE SIDE SHIELD WHERE INDICATED ON PLANS; DIMMING/DAWN/DUSK MOTION SENSOR, FIELD PROGRAMMABLE OUTPUT BASED ON MOTION, PROGRAMMED PER OWNERS REQUIREMENTS; 100,000 HOUR (L70); 5 YR. WARRANTY; MOUNTED ON A 15' ROUND TAPERED ALUMINUM POLE w/VIBRATION DAMPENING; MAX EPA 5.4 @ 120; LIFETIME WARRANTY ON POLE; SINGLE HEAD LUMINAIRE MOUNTING; CCBA; DLC PREMIUM LISTED	LITHONIA/GENERAL STRUCTURES INC	DSX1-P3-40K-70-T2M-MVOL

FLOOR BOX GENERAL NOTES

1. PROVIDE FLOOR BOX WITHIN CONCRETE FLOOR SLAB AS SHOWN (REVIEW ARCHITECTURAL AND ELECTRICAL DRAWINGS). PRIOR TO PLACING CONCRETE SLAB, HOLD A COORDINATION WITH ELECTRICIAN, CONCRETE SUBCONTRACTOR, AND A REPRESENTATIVE FROM THE SCHOOL DISTRICT'S FURNITURE VENDOR TO REVIEW ELECTRICAL REQUIREMENTS AND FINAL ELECTRICAL FURNITURE IN-FEED LOCATIONS.
2. PROVIDE ALL NECESSARY FLOOR BOX ACCESSORIES REQUIRED FOR POWER, DATA, AND AV DEVICES.
3. COORDINATE FINAL FINISHES WITH ARCHITECT

FLOOR BOX SCHEDULE

TYPE	DESCRIPTION	MFR.	CATALOG NUMBER
FB01	MULTI-SERVICE RECESSED EIGHT-COMPARTMENT FLOOR BOXES WITH (3) 1-GANG COMPARTMENTS FOR POWER, (1) 1-GANG COMPARTMENT FOR DATA, (2)-GANG FOR SPARE, (2) 1-GANG COMPARTMENTS FOR AV WHERE INDICATED. INCLUDE MUDCAP, DEVICE PLATES, BLANK PLATES, MOUNTING BRACKETS, SPACERS AND COVER ASSEMBLIES. PROVIDE FLUSH TILE ASSEMBLIES. SEE SECTION 26 2726, WIRING DEVICES AND 271500 TELEPHONE/DATA SYSTEM. PROVIDE NUMBER OF DEVICES INDICATED IN DRAWINGS WITH A MINIMUM OF (3) DUPLEX RECEPTACLES, MINIMUM OF TYPE "2" DATA OUTLET UNLESS OTHERWISE NOTED, AND CONDUITS REQUIRED FOR AV INFRASTRUCTURE IN EACH FLOOR BOX; STUB (2) SPARE 1-1/4" CONDUIT FROM BOX TO ACCESSIBLE CEILING WITHIN ROOM AND LABEL "SPARE FLOOR BOX CONDUIT"	WIREMOLD	EFBBS-OG-SCBA-XX-XX
PT01	MULTI-SERVICE RECESSED EIGHT-COMPARTMENT POKE-THRUS WITH (3) 1-GANG COMPARTMENTS FOR POWER, (1) 1-GANG COMPARTMENT FOR DATA, (2)-GANG FOR SPARE, (2) 1-GANG COMPARTMENTS FOR AV WHERE INDICATED. INCLUDE MUDCAP, DEVICE PLATES, BLANK PLATES, MOUNTING BRACKETS, SPACERS AND COVER ASSEMBLIES. PROVIDE FLUSH TILE ASSEMBLIES. SEE SECTION 26 2726, WIRING DEVICES AND 271500 TELEPHONE/DATA SYSTEM. PROVIDE NUMBER OF DEVICES INDICATED IN DRAWINGS WITH A MINIMUM OF (3) DUPLEX RECEPTACLES, MINIMUM OF TYPE "2" DATA OUTLET UNLESS OTHERWISE NOTED, AND CONDUITS REQUIRED FOR AV INFRASTRUCTURE IN EACH FLOOR BOX; STUB (2) SPARE 1-1/4" CONDUIT FROM BOX TO ACCESSIBLE CEILING WITHIN ROOM AND LABEL "SPARE FLOOR BOX CONDUIT"	WIREMOLD	8ATC2P-SCBA
PT02	6" POKE-THRU, POWER AND SPARE. PROVIDE A POKE-THRU ASSEMBLY TO PROVIDE INTERFACE POWER. THESE DEVICES SHALL PROVIDE FLUSH DEVICE OUTLETS THAT WILL NOT OBSTRUCT THE FLOOR AREA. PROVIDE NUMBER OF DEVICES INDICATED IN DRAWINGS WITH A MINIMUM OF (2) DUPLEX RECEPTACLES UNLESS OTHERWISE NOTED, AND CONDUITS REQUIRED. PROVIDE A MINIMUM OF (2) 1-1/4" CONDUITS STUBBED TO ACCESSIBLE CEILING SPACE BELOW FOR FUTURE USE.	WIREMOLD	6ATC2P-SCBA

RELAY PANEL SCHEDULE '1RPC1'

CABINET SIZE (# OF RELAYS): SPARE RELAYS:

MOUNTING: VOLTAGE: CONTROL CIRCUIT: AIC RATING:

RELAY	POWER	EMERGENCY	SPACE	CONTROL	DIMMING	PROGRAMMING
1RPC1-1	1HC1-1	No	VESTIBULE 1100	LWS-'LC1'	0-10V	A
1RPC1-2	1HC1-13	No	NORTH PARKING	LWS-'LC1'	TOD, MS, PC	C
1RPC1-3	1LC1-21	No	CONTROLLED RECEPTACLE	LWS-'LC1'	N	D
1RPC1-4	1LC1-14	No	CONTROLLED RECEPTACLE	LWS-'LC1'	N	D
1RPC1-5	1LC1-16	No	CONTROLLED RECEPTACLE	LWS-'LC1'	N	D
1RPC1-6	1LC1-23	No	CONTROLLED RECEPTACLE	LWS-'LC1'	N	D
1RPC1-7	1HC1-2	No	WEST DRIVEWAY	LWS-'LC1'	TOD, MS, PC	C
1RPC1-8	1HC1-4	No	NORTH PARKING	LWS-'LC1'	TOD, MS, PC	C
1RPC1-9	1HC1-1	No	CORR. 1118	LWS-'LC1'	0-10V	A
1RPC1-10	1HC1-25	No	DISPLAY CABINET CORR. 1101	LWS-'LC1'	N	A
1RPC1-11	1HC1-6	No	EAST PARKING	LWS-'LC1'	TOD, MS, PC	C
1RPC1-12	1LA2-5	No	FLAG POLE	LWS-'LC1'	N	D
1RPC1-13	1HC1-23	No	MARQUEE	LWS-'LC1'	N	D

RELAY PANEL SCHEDULE '1RPD1'

CABINET SIZE (# OF RELAYS): SPARE RELAYS:

MOUNTING: VOLTAGE: CONTROL CIRCUIT: AIC RATING:

RELAY	POWER	EMERGENCY	SPACE	CONTROL	DIMMING	PROGRAMMING
1RPD1-1	1HD1-13	No	MAIN CORR. 1101	LWS-'LC1'	0-10V	A
1RPD1-2	1HD1-1	No	COLLAB 1400A	LWS-'LC1', 'LC4'	0-10V	A
1RPD1-3	1LD2-3	No	CONTROLLED RECEPTACLE	LWS-'LC1'	N	D
1RPD1-4	1LD1-19	No	CONTROLLED RECEPTACLE	LWS-'LC1'	N	D
1RPD1-5	1LD2-5	No	CONTROLLED RECEPTACLE	LWS-'LC1'	N	D
1RPD1-6	1LB2-22	No	CONTROLLED RECEPTACLE	LWS-'LC1'	N	D
1RPD1-7	2EMH1-1	Yes	VESTIBULE 1335	LWS-'LC1'	0-10V	B
1RPD1-8	1LA1-12	No	CONTROLLED RECEPTACLE	LWS-'LC1'	N	D

RELAY PANEL SCHEDULE '2RPC1'

CABINET SIZE (# OF RELAYS): SPARE RELAYS:

MOUNTING: VOLTAGE: CONTROL CIRCUIT: AIC RATING:

RELAY	POWER	EMERGENCY	SPACE	CONTROL	DIMMING	PROGRAMMING
2RPC1-1	2EMH1-5	Yes	COLLAB 1300A EM	LWS-'LC1', 'LC4'	0-10V	B
2RPC1-2	1HC1-9	No	COLLAB 1300A	LWS-'LC1', 'LC4'	0-10V	A
2RPC1-3	2EMH1-23	Yes	NORTHWEST BUILDING EXT.	LWS-'LC1'	N	D
2RPC1-4	2EMH1-1	Yes	MAIN CORR. 1101 EM	LWS-'LC1'	0-10V	B
2RPC1-5	2EMH1-25	Yes	NORTHEAST BUILDING EXT.	LWS-'LC1'	N	D
2RPC1-6	2EMH1-13	Yes	CORR. 2300 EM	LWS-'LC1'	0-10V	B
2RPC1-7	2EMH1-31	Yes	LSC3 CONTROL	LWS-'LC1'	0-10V	B
2RPC1-8	2EMH1-29	Yes	VESTIBULE 1118	LWS-'LC1'	0-10V	B
2RPC1-9	2EMH1-29	Yes	NORTHEAST ENTRANCE	LWS-'LC1'	0-10V	B
2RPC1-10	2EMH1-1	Yes	CORR. 1118 EM	LWS-'LC1'	0-10V	B
2RPC1-11	2EMH1-2	Yes	NORTH ENTRANCE	LWS-'LC1'	0-10V	B
2RPC1-12	2EMH1-5	Yes	STAIRS 1326	LWS-'LC1'	0-10V	B

RELAY PANEL SCHEDULE '2RPD1'

CABINET SIZE (# OF RELAYS): SPARE RELAYS:

MOUNTING: VOLTAGE: CONTROL CIRCUIT: AIC RATING:

RELAY	POWER	EMERGENCY	SPACE	CONTROL	DIMMING	PROGRAMMING
2RPD1-1	2EMH2-5	Yes	COLLAB 1400A EM	LWS-'LC1', 'LC4'	0-10V	B
2RPD1-2	2EMH2-21	Yes	SOUTH EXT. LIGHTS	LWS-'LC1'	0-10V	D
2RPD1-3	2EMH2-23	Yes	SOUTHEAST EXT. LIGHTS	LWS-'LC1'	0-10V	D
2RPD1-4	2EMH2-11	Yes	CORR. 2400 EM	LWS-'LC1'	0-10V	B
2RPD1-5	2HD1-3	No	CORR. 2400	LWS-'LC1'	0-10V	A
2RPD1-6	2HD1-3	No	CORR. 2101	LWS-'LC1'	0-10V	A
2RPD1-7	2EMH2-11	Yes	CORR. 2101 EM	LWS-'LC1'	0-10V	B
2RPD1-8	2HD1-13	No	MULTIPURPOSE 1200	LWS-'LC1', 'LC2', 'LC3', 'LC4'	0-10V	A
2RPD1-9	2EMH2-25	Yes	MULTIPURPOSE 1200 EM	LWS-'LC1', 'LC2', 'LC3', 'LC4'	0-10V	B
2RPD1-10	2EMH2-27	Yes	LSC2 CONTROL	LWS-'LC1'	0-10V	B
2RPD1-11	2EMH2-29	Yes	LSC3 CONTROL	LWS-'LC1'	0-10V	B
2RPD1-12	2HD1-3	No	SOUTH CORR. 2101 OVERHANG	LWS-'LC1'	0-10V	A
2RPD1-13	2EMH2-11	Yes	SOUTH CORR. 2101 OVERHANG EM	LWS-'LC1'	0-10V	B
2RPD1-14	1HC1-13	No	NORTH CORR. 2101 OVERHANG	LWS-'LC1'	0-10V	A
2RPD1-15	2EMH1-13	Yes	NORTH CORR. 2101 OVERHANG EM	LWS-'LC1'	0-10V	B
2RPD1-16	2EMH2-7	Yes	STAIRS 1419	LWS-'LC1'	0-10V	B

SENSOR GENERAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE SENSOR MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.
2. PROVIDE DUAL TECHNOLOGY OCCUPANCY SENSORS AS SHOWN. LOCATE OCCUPANCY SENSORS PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS. PROVIDE ADDITIONAL SENSORS IF REQUIRED TO PROPERLY COVER THE RESPECTIVE ROOM.
3. EACH ZONE SHALL HAVE COVERAGE BY OCCUPANCY SENSOR SUCH THAT NO BLIND SPOT EXIST.
4. UPON COMPLETION OF THE INSTALLATION, THE SYSTEM SHALL BE COMPLETELY COMMISSIONED BY THE MANUFACTURER'S FACTORY AUTHORIZED TECHNICIAN WHO WILL VERIFY ALL ADJUSTMENTS AND SENSOR PLACEMENT TO ENSURE A TROUBLE FREE INSTALLATION.
5. THE LOCATION AND QUANTITIES OF SENSORS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE ONLY THE ROOMS WHICH ARE TO BE PROVIDED WITH SENSORS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ADDITIONAL SENSORS IF REQUIRED TO PROPERLY COVER THE RESPECTIVE ROOM.
6. PROVIDE DAYLIGHT ZONE CONTROL REQUIREMENTS PER IECC-2018 C405.2.2.3 LOCATE DAYLIGHT SENSORS PER MANUFACTURER'S RECOMMENDATION AND WHERE REQUIRED WITHIN THE ROOM FOR PROPER COVERAGE.
7. PROVIDE OCCUPANCY SENSOR WITH AN ADDITIONAL SET OF DRY CONTACTS FOR HVAC CONTROL AT EACH VAV BOX LOCATION. COORDINATE WITH MECHANICAL DRAWINGS AND THE MECHANICAL CONTRACTOR FOR EXACT LOCATIONS.

CONTROL LEGEND

PC	EXTERIOR PHOTOCELL
OC	OCCUPANCY/VACANCY SENSOR
DS	INTERIOR DAYLIGHT SENSOR
MS	EXTERIOR MOTION SENSOR
TC	ANALOG ASTRONOMICAL TIMECLOCK
TOD	TIME OF DAY - SOFTWARE BASED
LWS	LOCAL WALLSTATION

DIMMING LEGEND

N	NONE
0-10	0-10 VOLT DIMMING
DMX	DIGITAL MULTIPLEX (DMX) DIMMING
3WD	3-WIRE DIMMING
ELV	ELECTRONIC LOW VOLTAGE
MLV	MAGNETIC LOW VOLTAGE
DA	DALI DIMMING

PROGRAMMING

A	MASTER CLOCK SCHEDULE (PROVIDED BY OWNER) - OVERRIDE OPERATIONS PER WALLSTATION INDICATED.
B	EGRESS LIGHTING, MASTER CLOCK SHCEDULE (PROVIDED BY OWNER) - OVERRIDE OPERATIONS PER WALLSTATION INDICATED.
C	ASTRONOMICAL SCHEUDLE - DUSK ON/11:00 PM OFF, 6:AM ON/DAWN OFF, OVERRIDE OPERATIONS PER WALLSTATION 'LC1'. LIGHT FIXTURES W/DIMMING OCCUPANCY SENSOR, FIXTURES SHALL DIM DOWN TO 50% AFTER FIVE MINITUES OF NO ACTIVITY.
D	ASTRONOMICAL SCHEDULE - DUSK ON/DAWN OFF; OVERRIDE OPERATIONS PER WALLSTATION LC1

GENERAL NOTES

1. PROGRAM SYSTEM TO MEET THE REQUIREMENTS OF IECC 2018 OR CURRENT ENERGY CODE.
2. CONFIRM SWITCHING AND PROGRAMMING SCHEME WITH OWNER PRIOR TO PROGRAMMING.
3. PROGRAM SYSTEM TO INCORPORATE AUTO DAYLIGHT SAVINGS ADJUSTMENTS, ASTRONOMICAL CLOCK WITH OFFSETS, HOLIDAY DATES, AND NETWORK OVERRIDE.
4. REFER TO WALLSTATION DIAGRAMS FOR FACTORY ENGRAVED LABELING FOR ALL INDIVIDUAL PUSH-BUTTONS. DEVICE AND COVERPLATE COLORS SELECTED BY ARCHITECT.
5. SUBMIT ALL WALLSTATION LAYOUTS, ENGRAVING AND CONTROL SEQUENES DURING THE SHOP DRAWINGS REVIEW PROCESS.
6. PROVIDE RELAY BARRIER FOR VOLTAGE AND POWER SOURCE SEPARATION (EMERGENCY AND NORMAL CIRCUITS, VOLTAGE DIFFERENCES).
7. PROGRAM NORMAL AND EMERGENCY RELAYS IN RELATED CORRIDORS TO OPERATE TOGETHER.
8. ALL RELAYS REQUIRING DIMMING AND/OR DAYLIGHT HARVESTING SHALL UTILIZE 0-10V DIMMING. PROVIDE 0-10V DIMMING WIRING AND CONTROLS AS REQUIRED.
9. SYSTEM MUST INTERFACE WITH NEW OR EXISTING ENERGY MANAGEMENT SYSTEM/BMS. PROVIDE SYSTEM CONSISTING WITH MONITOR(S), COMMUNICATIONS EQUIPMENT, A CONTROLLER(S), TIMER(S), OR OTHER DEVICE(S) THAT MONITOR AND/OR CONTROL AN ELECTRICAL LOAD OR POWER PRODUCTION OR STORAGE SOURCE. COORDINATE EXACT TIE-IN POINTS AND COMMUNICATION PROTOCOL/MODULES REQUIRED. PROGRAM ACCORDINGLY AND PER OWNERS REQUIREMENTS.
10. PROVIDE A MINIMUM OF (5) SPARE RELAYS.

EQUIPMENT SCHEDULE

CONNECTION TYPE NOTES:

1. NON-FUSED DISCONNECT SWITCH
2. FUSED DISCONNECT SWITCH
3. BREAKER IN ENCLOSURE
4. MANUAL STARTER WITH THERMAL OVERLOAD
5. MAGNETIC STARTER
6. MAGNETIC STARTER/NON-FUSED DISCONNECT COMBINATION
7. MAGNETIC STARTER/FUSED DISCONNECT COMBINATION
8. MAGNETIC STARTER/BREAKER COMBINATION
9. VARIABLE FREQUENCY DRIVE
10. REDUCED VOLTAGE STARTER
11. DIRECT CONNECTION
12. RECEPTACLE/SPECIAL PURPOSE OUTLET/ETC.
13. TWO-SPEED STARTER. COORDINATE WITH MOTOR TYPE
14. SOLID STATE SOFT-STARTER

RESPONSIBILITY LEGEND:

A. FURNISHED, INSTALLED AND CONNECTED UNDER DIVISION 26(16)
B. FURNISHED AND INSTALLED UNDER ANOTHER DIVISION. REQUIRED CONNECTION UNDER DIVISION 26(16)
C. FURNISHED UNDER ANOTHER DIVISION BUT INSTALLED AND CONNECTED UNDER DIVISION 26(16)
D. FURNISHED, INSTALLED AND CONNECTED UNDER ANOTHER DIVISION

CB = CIRCUIT BREAKER

NOTE 1: PER 250.122(A), EQUIPMENT GROUND IS NOT REQUIRED TO BE LARGER THAN THE PHASE CONDUCTOR
NOTE 2: OVERCURRENT PROTECTION DEVICE (OCPD) SHOWN IS LOCATED AT POWER PANEL. ALL FUSING TO BE SIZED IN ACCORDANCE WITH FUSE MFR RECOMMENDATION FOR MOTOR NAME PLATE RATING.
NOTE 3: ALL EQUIPMENT TO BE RATED FOR THE ENVIRONMENT FOR WHICH IT IS INSTALLED.

UNIT	#	DESCRIPTION	ELECTRICAL EQUIPMENT INFORMATION							WIRE				OCPD		REMARKS
			LOAD													
			HP	FLA	MCA	VA	VOLTAGE	PHASE	FULL LOAD AMPS	CONDUIT SIZE	SETS	QTY	SIZE	EQ. GROUND	TYPE	AMPS	STARTER/ DISC/ VFD OTHER (SEE NOTES)	
AC	1	SPLIT SYSTEM AC UNIT	0.00	0 A	14 A	0 VA	208 V	1	11.2 A	3/4"	1	2	12	12	CB	20 A	2 A	
AC	1	SPLIT SYSTEM AC UNIT	0.00	0 A	14 A	0 VA	208 V	1	11.2 A	3/4"	1	2	12	12	CB	20 A	2 A	
AC	1	SPLIT SYSTEM AC UNIT	0.00	0 A	14 A	0 VA	208 V	1	11.2 A	3/4"	1	2	12	12	CB	20 A	2 A	
AC	1	SPLIT SYSTEM AC UNIT	0.00	0 A	14 A	0 VA	208 V	1	11.2 A	3/4"	1	2	12	12	CB	20 A	2 A	
AC	2	SPLIT SYSTEM AC UNIT	0.00	0 A	14 A	0 VA	208 V	1	11.2 A	3/4"	1	2	12	12	CB	20 A	2 A	
AHU	1	AIR HANDLING UNIT	75.00	0 A	0 A	0 VA	480 V	3	96.0 A	1 1/2"	1	3	1/0	6	CB	150 A	9 B	
AHU	2	AIR HANDLING UNIT	30.00	0 A	0 A	0 VA	480 V	3	40.0 A	3/4"	1	3	6	8	CB	60 A	9 B	
AHU	3	AIR HANDLING UNIT	75.00	0 A	0 A	0 VA	480 V	3	96.0 A	1 1/2"	1	3	1/0	6	CB	150 A	9 B	
AHU	4	AIR HANDLING UNIT	10.00	0 A	0 A	0 VA	480 V	3	14.0 A	3/4"	1	3	12	12	CB	25 A	9 B	
B	1	BOILER	0.00	5 A	0 A	0 VA	480 V	3	5.0 A	3/4"	1	3	12	12	CB	15 A	2 A	
B	2	BOILER	0.00	5 A	0 A	0 VA	480 V	3	5.0 A	3/4"	1	3	12	12	CB	15 A	2 A	
CP	1	CIRCULATION PUMP	0.50	0 A	0 A	0 VA	120 V	1	9.8 A	3/4"	1	2	12	12	CB	15 A	2 A	
CP	1	CIRCULATION PUMP	0.50	0 A	0 A	0 VA	120 V	1	9.8 A	3/4"	1	2	12	12	CB	15 A	2 A	
CP	2	RECIRC PUMP	0.25	0 A	0 A	0 VA	120 V	1	5.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
CP	2	RECIRC PUMP	0.25	0 A	0 A	0 VA	120 V	1	5.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
CT	1	COOLING TOWER	25.00	0 A	0 A	0 VA	480 V	3	34.0 A	3/4"	1	3	6	8	CB	60 A	9 A	
CTF	1	COOLING TOWER FILTER	2.00	0 A	0 A	0 VA	480 V	3	3.4 A	3/4"	1	3	12	12	CB	15 A	7 A	
CU	1	CONDENSING UNIT	0.00	0 A	21 A	0 VA	480 V	3	16.8 A	3/4"	1	3	10	10	CB	30 A	9 B	
DL	1	DOCK LEVELER	1.00	0 A	0 A	0 VA	208 V	3	4.6 A	3/4"	1	3	12	12	CB	15 A	11 A	
EF	1	EXHAUST FAN	2.00	0 A	0 A	0 VA	480 V	3	3.4 A	3/4"	1	3	12	12	CB	15 A	7 A	
EF	2	EXHAUST FAN	0.25	0 A	0 A	0 VA	120 V	1	5.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	3	EXHAUST FAN	0.00	0 A	0 A	400 VA	120 V	1	3.3 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	4	EXHAUST FAN	0.25	0 A	0 A	0 VA	120 V	1	5.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	5	EXHAUST FAN	0.00	0 A	0 A	100 VA	120 V	1	0.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	6	EXHAUST FAN	0.25	0 A	0 A	0 VA	120 V	1	5.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	7	EXHAUST FAN	0.00	0 A	0 A	200 VA	120 V	1	1.7 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	8	EXHAUST FAN	0.00	0 A	0 A	400 VA	120 V	1	3.3 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	9	EXHAUST FAN	0.00	0 A	0 A	400 VA	120 V	1	3.3 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	10	EXHAUST FAN	0.00	0 A	0 A	400 VA	120 V	1	3.3 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	11	EXHAUST FAN	0.25	0 A	0 A	0 VA	120 V	1	5.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	12	EXHAUST FAN	0.00	0 A	0 A	400 VA	120 V	1	3.3 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	13	EXHAUST FAN	0.00	0 A	0 A	400 VA	120 V	1	3.3 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	14	EXHAUST FAN	0.50	0 A	0 A	0 VA	120 V	1	9.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	15	EXHAUST FAN	0.00	0 A	0 A	400 VA	120 V	1	3.3 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	16	EXHAUST FAN	0.25	0 A	0 A	0 VA	120 V	1	5.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	17	EXHAUST FAN	0.25	0 A	0 A	0 VA	120 V	1	5.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	18	EXHAUST FAN	0.25	0 A	0 A	0 VA	120 V	1	5.8 A	3/4"	1	2	12	12	CB	15 A	4 A	
EF	19	EXHAUST FAN	0.00	0 A	0 A	400 VA	120 V	1	3.3 A	3/4"	1	2	12	12	CB	15 A	4 A	
EUH	1	ELECTRIC UNIT HEATER	0.00	0 A	0 A	5000 VA	480 V	3	6.0 A	3/4"	1	3	12	12	CB	15 A	2 A	
EUH	1	ELECTRIC UNIT HEATER	0.00	0 A	0 A	5000 VA	480 V	3	6.0 A	3/4"	1	3	12	12	CB	15 A	2 A	
GF	1	GLYCOL FEED UNIT	0.00	0 A	0 A	500 VA	120 V	1	4.2 A	3/4"	1	2	12	12	CB	15 A	12 A	
GUH	1	GAS UNIT HEATER	0.00	0 A	0 A	300 VA	120 V	1	2.5 A	3/4"	1	2	12	12	CB	15 A	4 A	
MAU	2	MAKE-UP AIR UNIT	0.00	0 A	7.3 A	0 VA	480 V	3	5.8 A	3/4"	1	3	12	12	CB	15 A	7 A	
P	1	PUMP	1.50	0 A	0 A	0 VA	480 V	3	3.0 A	3/4"	1	3	12	12	CB	15 A	7 A	
P	2	PUMP	1.50	0 A	0 A	0 VA	480 V	3	3.0 A	3/4"	1	3	12	12	CB	15 A	7 A	
P	3	PUMP	10.00	0 A	0 A	0 VA	480 V	3	14.0 A	3/4"	1	3	12	12	CB	25 A	9 A	
P	4	PUMP	10.00	0 A	0 A	0 VA	480 V	3	14.0 A	3/4"	1	3	12	12	CB	25 A	9 A	
P	5	PUMP	10.00	0 A	0 A	0 VA	480 V	3	14.0 A	3/4"	1	3	12	12	CB	25 A	7 A	
P	6	PUMP	10.00	0 A	0 A	0 VA	480 V	3	14.0 A	3/4"	1	3	12	12	CB	25 A	7 A	
RT	1	ROOFTOP UNIT	0.00	0 A	13 A	0 VA	480 V	3	10.4 A	3/4"	1	3	12	12	CB	20 A	1 B	
RT	2	ROOFTOP UNIT	0.00	0 A	11 A	0 VA	480 V	3	8.8 A	3/4"	1	3	12	12	CB	15 A	1 B	
TP	1	TRAP PRIMER	0.00	0 A	0 A	500 VA	120 V	1	4.2 A	3/4"	1	2	12	12	CB	15 A	12 A	
TP	1	TRAP PRIMER	0.00	0 A	0 A	500 VA	120 V	1	4.2 A	3/4"	1	2	12	12	CB	15 A	12 A	
TP	1	TRAP PRIMER	0.00	0 A	0 A	500 VA	120 V	1	4.2 A	3/4"	1	2	12	12	CB	15 A	12 A	
TP	1	TRAP PRIMER	0.00	0 A	0 A	500 VA	120 V	1	4.2 A	3/4"	1	2	12	12	CB	15 A	12 A	
UH	1	UNIT HEATER	0.00	0 A	0 A	16 VA	120 V	1	0.1 A	3/4"	1	2	12	12	CB	15 A	4 A	
VF	1	VENTILATION FAN	0.00	0 A	0 A	400 VA	120 V	1	3.3 A	3/4"	1	2	12	12	CB	15 A	4 A	DIV. 26 TO INTERLOCK WITH MOTORIZED DAMPER
WH	1	WATER HEATER	0.00	10 A	0 A	0 VA	120 V	1	10.0 A	3/4"	1	2	12	12	CB	15 A	12 A	
WH	2	WATER HEATER	0.00	10 A	0 A	0 VA	120 V	1	10.0 A	3/4"	1	2	12	12	CB	15 A	12 A	
WH	3	WATER HEATER	0.00	10 A	0 A	0 VA	120 V	1	10.0 A	3/4"	1	2	12	12	CB	15 A	12 A	
WLC	1	ELECTRIC WATER LEVEL CONTROL	0.00	24 A	0 A	0 VA	120 V	1	24.0 A	3/4"	1	2	10	10	CB	40 A	11 A	

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

EQUIPMENT SCHEDULES AND NOTES

E003

11/6/2023 8:57:39 PM

SECURITY TYPE SCHEDULE NOTES

1. OGDEN SCHOOL DISTRICT WILL BE PURCHASING ALL OF THE ACTIVE VIDEO SURVEILLANCE EQUIPMENT, AND THE VIDEO SURVEILLANCE CONTRACTOR SHALL INSTALL THEM. (REFER TO THE LOW VOLTAGE SCOPE OF WORK SCHEDULE FOR DETAILS). THE VIDEO SURVEILLANCE CONTRACTOR IS RESPONSIBLE TO PAINT THE CAMERA HOUSINGS AND MOUNTING HARDWARE TO MATCH THE BUILDINGS FINISH COLOR PRIOR TO STARTING ANY WORK THE VIDEO SURVEILLANCE INSTALLATION CONTRACTOR SHALL COORDINATE A MEETING WITH THE SCHOOL DISTRICT TO REVIEW AND VERIFY:
   1. EACH SURVEILLANCE CAMERA LOCATION, HEIGHT, ORIENTATION, VIEW, AND WHAT COLOR THE CAMERA HOUSING AND MOUNTING BRACKETS NEED TO BE.
   2. WHICH EF/ER/TR(MDF/IDF) ROOM THE HEAD-END VIDEO SURVEILLANCE EQUIPMENT (NVR) WILL BE INSTALLED INTO.

2. PRIOR TO STARTING ANY WORK THE DIV.28 ACCESS CONTROL INSTALLATION CONTRACTOR SHALL COORDINATE A MEETING WITH THE OWNER, THE DIV.8 CONTRACTOR, AND THE ELECTRICAL CONTRACTOR TO REVIEW:
   1. THE DIV.8 DOOR HARDWARE SPECIFICATIONS.
   2. WHAT ELECTRIFIED DOOR HARDWARE IS GOING TO GET INSTALLED ONTO EACH DOOR.
   3. THE POWER REQUIREMENTS FOR ALL OF THE ELECTRIFIED EQUIPMENT THAT IS GETTING INSTALLED.
   4. HOW EACH DOOR WILL NEED TO BE PROGRAMMED TO OPERATE.
   5. WHICH ACCESS CONTROL DOORS WILL NEED TO BE PROGRAMMED FAIL SAFE OR FAIL SECURE IN EMERGENCY OR FIRE ALARM SITUATIONS.
   6. VERIFY WHICH WALL AREA IN THE EF/ER/TR ROOM IS TO BE UTILIZED TO INSTALL THE HEAD-END ACCESS CONTROL PANEL(S) AND THE ELECTRIFIED DOOR HARDWARE POWER SUPPLIES.
   7. WHICH ELECTRICAL CIRCUIT THE HEAD-END ACCESS CONTROL PANEL AND THE ELECTRIFIED DOOR HARDWARE POWER SUPPLIES SHOULD BE CONNECTING TO (EMERGENCY BACK-UP POWER CIRCUIT, OR A STANDARD CIRCUIT).

SYSTEMS GENERAL NOTES

1. FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY AND BASED UPON A PERFORMANCE SPECIFICATION. ALL NEW EQUIPMENT/DEVICE QUANTITIES, LOCATION, AND ALL NATIONAL & LOCAL CODE COMPLIANCE TO BE PROVIDED AND STAMPED BY A LICENSED FIRE ALARM ENGINEER AND INCLUDED IN THE FIRE ALARM CONTRACTORS BID. IN NO WAY ARE THE DEVICES SHOWN ON THESE DRAWINGS TO BE IMPLEMENTED AS FINAL DESIGN DOCUMENTS

2. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, PRECAST CONCRETE, MASONRY AND GYP WALLS.

3. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT QUANTITY AND LOCATIONS OF ALL FIRE SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES WITH FIRE SPRINKLER DRAWINGS. CONNECT ALL TAMPER AND FLOW SWITCHES TO FIRE ALARM SYSTEM.

4. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND QUANTITY OF ALL DUCT TYPE SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. HARD WIRE TO RELAY STARTER.

5. REGARDLESS OF WHAT IS SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATIONS FOR MAGNETIC DOOR HOLDER AND OPERATION REQUIREMENTS.
ALL VISUAL DEVICES SHALL BE SYNCHRONIZED WITHIN THE BUILDING REGARDLESS OF PROJECT SCOPE BOUNDARIES.

6. PROVIDE FIRE ALARM RELAY MODULES FOR ALL DOORS WITH ACCESS CONTROL DEVICES.

7. PROVIDE (2) DUCT TYPE SMOKE DETECTOR FOR EACH FAN COIL UNIT, AHU, SUPPLY FAN AND HEAT PUMP OF 2000 CFM OR GREATER.

8. PROVIDE 120V CIRCUIT FROM THE NEAREST EQUIPMENT BRANCH PANELBOARD FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER. REFER TO DIAGRAM D012.

9. COORDINATE EXACT LOCATIONS OF CREDENTIAL CARD READERS AND ADA CONTROLS STATIONS WITH ARCHITECTURAL & SYSTEM DRAWINGS PRIOR TO ROUGH-IN. PROVIDE ALL CREDENTIAL CARD READER LOCATIONS AS REQUIRED PER ENTIRE CONSTRUCTION DOCUMENTS.

10. COORDINATE CLOSELY WITH THE DIV.8 COMMERCIAL DOOR AND HARDWARE CONTRACTOR TO ASSURE PROPER PLACEMENT OF ELECTRIFIED DOOR HARDWARE EQUIPMENT.

11. PROVIDE RACEWAY, CONDUIT, AND WIRING FOR SECURITY DEVICES INDICATED. PROVIDE CONCEALED 3/4" C TYPICAL FOR LINES SHOWN TO SECURITY DEVICES. COORDINATE ALL JUNCTION BOX ROUGH-IN LOCATIONS WITH THE OWNER AND ACCESS SYSTEM CONTROL SYSTEM SUPPLIER PRIOR TO ANY ROUGH-IN.

12. DIV. 8 AND DIV 28 CONTRACTORS SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO OUTLINE POWER REQUIREMENTS AND CABLING FOR ALL ELECTRONIC ACCESS CONTROL EQUIPMENT AND EXACT DEVICE LOCATIONS.

13. PROVIDE ONE 4SQ J-BOX AND COVER ON PROTECTED SIDE OF DOORWAY IN ACCESSIBLE CEILING SPACE OR IN ANOTHER ACCESSIBLE LOCATION. PROVIDE HANDY BOX IN DOOR JAM, AND MOUNT BEFORE GROUTED. DRILL A 1/8" PILOT HOLE FOR DEVICE MOUNTING.

14. ALL CABLING TO DEVICES THAT ARE INSTALLED ON DOOR FRAMES OR MULLIONS SHALL BE ROUTED THROUGH THE INSIDE OF THE DOOR FRAME & MULLIONS. COORDINATE INSTALLATION WITH THE DOORWINDOW CONTRACTOR PRIOR TO ANY ROUGH-IN.

15. ELECTRONIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, CRASH BARS, ETC.) SHALL BE PROVIDED BY DIV. 8. REVIEW THE DOOR HARDWARE SCHEDULE TO VERIFY THE OPERATIONAL FUNCTIONALITY AND THE LOCK VOLTAGES WILL WORK FOR EACH DOOR.

16. POWER SUPPLIES FOR ELECTRIFIED LOCKS AND ACCESS CONTROL DEVICES SHALL BE PROVIDED BY THE DIV. 28 CONTRACTOR. COORDINATE WITH THE DIV.8 CONTRACTOR FOR EXACT POWER REQUIREMENTS.

17. ALL ACCESS CONTROL SYSTEM CABLING SHALL BE RAN BACK TO THE ASSOCIATED HEAD-END AND/OR SLAVE PANELS AND POWER SUPPLIES THAT ARE CENTRALLY LOCATED IN EF/ER/TR(MDF/IDF) ROOMS. ALTERNATE CONFIGURATIONS MAY BE ACCEPTABLE PROVIDED THAT THE CONTRACTOR SUBMITS A WRITTEN APPROVAL AND ALLOWS FOR ANY INCREASES FOR WIRING & EQUIPMENT AND SUBMITS PLAN DRAWINGS THAT SHOW THE NEW CONFIGURATION.

18. HEAD-END ACCESS CONTROL PANELS AND SUFFICIENT CONTROLLER BOARDS TO SERVICE THE NUMBER OF ACCESS DOORS SHOWN SHALL BE MOUNTED ON 4X8 FIRE RATED PLYWOOD BACKER.

19. THE ACCESS CONTROL SYSTEM SHALL INCLUDE RELAYS, EXTERNAL POWER SUPPLIES, AUXILIARY DEVICES OR INPUT/OUTPUT MODULES THAT ARE REQUIRED TO SUPPORT THE DOOR TYPES THAT ARE INDICATED FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL CARD READER AND DOOR CONTROL SYSTEM. THE REQUEST TO EXITS, DOOR CONTACTS, AND INDICATOR CIRCUITS SHALL BE SUPERVISED FOR OPEN CIRCUIT OR SHORT CIRCUIT FAULTS BETWEEN THE DEVICE CONTACTS AND THE ACCESS CONTROLLER.

20. ALL SECURITY CAMERAS SHOWN SHALL HAVE ONE CAT6A CABLE INSTALLED BY THE LOW VOLTAGE CONTRACTOR, WITH 10'-0" SERVICE LOOPS AT EACH CAMERA LOCATION AND BACK WHERE IT WILL BE TERMINATED IN THE EF/ER/TR(MDF/IDF) ROOMS, SO EQUIPMENT CAN BE MOVE OR RELOCATED IF REQUIRED.

21. THE SECURITY CONTRACTORS SHALL FOLLOW ALL OF THE MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS, & INSTRUCTIONS, AND THE OWNER'S REQUIREMENTS AND INSTRUCTIONS.

22. THE SECURITY CONTRACTORS SHALL INSTALL ALL EQUIPMENT USING INDUSTRIES BEST STANDARDS & PRACTICES.

23. ALL EXTERIOR DOORS, GARAGE DOORS, ROOF HATCHS OR ACCESS DOORS, EF/ER/TR (MDF/IDF) ROOM DOORS, RISER ROOMS, AND ANY DOOR EQUIPPED WITH A CREDENTIAL CARD READER, MUST HAVE A SEPARATE DOOR CONTACT FOR THE ACCESS CONTROL SYSTEM AND THE INTRUSION DETECTION SYSTEM.

24. SECURITY INTEGRATOR SHALL COORDINATE ALL DOOR HARDWARE WITH THE DIV.8 CONTRACTOR FOR LOCK TYPES, POWER SUPPLIES, AND ANY MISCELLANEOUS EQUIPMENT NECESSARY. CAREFULLY REVIEW DOOR HARDWARE SUBMITTAL AND SUMMARIZE DISCREPANCIES TO TEAM ASAP.

25. EQUIPMENT COUNTS ARE PROVIDED FOR INFORMATION ONLY AT A CONVENIENCE TO THE CONTRACTOR. IT STILL REMAINS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DRAWING QUANTITIES. IF A DISCREPANCY ARISES BETWEEN THE SCHEDULE COUNTS AND THE DRAWING COUNTS, THE HIGHEST QUANTITY SHALL BE INCLUDED IN THE BID. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE ALL SPECIFIED AND NON-SPECIFIED COMPONENTS NEEDED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.

26. PROVIDE FIRE ALARM INTERFACE WITH THE ACCESS CONTROL SYSTEM SO TO UNLOCK ALL INDICATED LOCKS UPON ANY FIRE ALARM INITIATION.

27. REFER TO THE SPECIFICATIONS FOR THE INTEGRATION & TIE-IN REQUIREMENTS BETWEEN SYSTEMS (VIDEO SURVEILLANCE SYSTEMS, ACCESS CONTROL SYSTEMS, INTRUSION DETECTION SYSTEMS, AND FIRE ALARM SYSTEMS, ETC.)

28. SECURITY INTEGRATOR SHALL CAREFULLY REVIEW THE REFLECTED CEILING PLANS, ARCHITECTURAL ELEVATIONS, AND MILLWORK DRAWINGS FOR ALL DEVICE & COMPONENT INSTALLATION PRIOR TO INSTALLING ANY EQUIPMENT.

29. ALL CAMERAS AND CAMERA MOUNTING HARDWARE ARE GOING TO BE OWNER FURNISHED, AND CONTRACTOR INSTALLED. CONTRACTOR SHALL PAINT MOUNTING HARDWARE AND CAMERAS TO MATCH THE BUILDING MOUNTING SURFACE COLOR. COORDINATE COLORS WITH ARCHITECT PRIOR TO PREP AND PAINTING.

30. CONTRACTOR SHALL VERIFY ALL CAMERA LOCATIONS, HEIGHTS, ORIENTATION, AND VIEWS WITH THE SCHOOL DISTRICT PRIOR TO STARTING ANY WORK TO ENSURE IDEAL VIEWS FOR EACH CAMERA.

ACCESS CONTROL TYPE SCHEDULE

LEGEND:

CR = CARD READER
BR = BIO READER
KCR = KEYPAD CARD READER
ICR = INTEGRATED CARD READER

ES = ELECTRIC STRIKE
ML = MAGNETIC LOCK
EL = ELECTRIC LOCK
ECB = ELECTRIC CRASH BAR

DED = DELAYED EGRESS RIM EXIT DEVICE
IDC = INTRUSION DOOR CONTACT
DPS = DOOR POSITION SWITCH
PP = POPIT MODULE

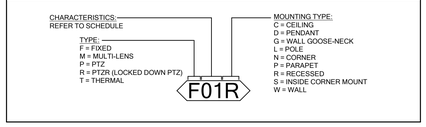
EH = ELECTRIC HINGE
PTL = POWER TRANSFER LOOP
PTH = POWER TRANSFER LOOP

PTE = PUSH TO EXIT BUTTON
REX = REQUEST TO EXIT
KS = KEY OVERRIDE SWITCH

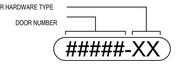
GENERAL NOTES:
1. CONTRACTOR TO COORDINATE WITH OWNER HOW DOORS WITH ELECTRIFIED DOOR HARDWARE WILL NEED TO OPERATE DURING ANEMERGENCY OR POWER OUTAGE (FAIL SAFE OR FAIL SECURE).
2. CONTRACTOR TO COORDINATE WITH OWNER FOR FIRE ALARM INTERFACE OPERATION FOR EACH DOOR THAT HAS ELECTRIFIED DOOR HARDWARE INSTALLED ON THEM.
3. THE DIV. 28 ACCESS CONTROL CONTRACTOR SHALL FIELD COORDINATE THE DOOR HARDWARE SPECIFICATIONS, EQUIPMENT, POWER REQUIREMENT, AND PROGRAMMING ANS OPERATIONAL REQUIREMENTS FOR EACH DOOR WITH DIV. 8 AND DIV. 26 CONTRACTORS PRIOR TO STARTING ANY WORK.

TYPE	DIAGRAM	DESCRIPTION	CREDENTIAL				ELECTRONIC LOCK					CONTACTS			POWER TRANSFER			EXIT DEVICE			NOTES
			CR	BR	KCR	ICR	ES	ML	EL	ECB	DED	IDC	DPS	PP	EH	PTH	PTL	PTE	REX	KS	
A		SINGLE DOOR	1	0	0	0	0	0	1	0	1	1	1	0	0	1	0	0	0	0	REFER TO SECURITY TYPE SCHEDULE NOTE #2
B		SINGLE DOOR	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	REFER TO SECURITY TYPE SCHEDULE NOTE #2
C		SINGLE DOOR	1	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	REFER TO SECURITY TYPE SCHEDULE NOTE #2
D		DOUBLE DOOR	1	0	0	0	0	0	0	2	0	2	2	0	0	2	0	0	0	0	REFER TO SECURITY TYPE SCHEDULE NOTE #2
F		DOUBLE DOOR	0	0	0	0	0	0	0	2	0	2	2	0	0	2	0	0	0	0	REFER TO SECURITY TYPE SCHEDULE NOTE #2
G		GARAGE DOOR	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	REFER TO SECURITY TYPE SCHEDULE NOTE #2
H		SINGLE DOOR	2	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	REFER TO SECURITY TYPE SCHEDULE NOTE #2
J		SINGLE DOOR	1	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	REFER TO SECURITY TYPE SCHEDULE NOTE #2
K		SINGLE DOOR	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	REFER TO SECURITY TYPE SCHEDULE NOTE #2

CAMERA SURVEILLANCE TAG LEGEND



ACCESS CONTROL TAG LEGEND



CAMERA SURVEILLANCE TYPE SCHEDULE

1. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL THE CAMERA MOUNTS & MOUNTING HARDWARE FROM EACH CAMERA.

2. PRIOR TO STARTING ANY WORK CONTRACTOR SHALL COORDINATE WITH THE OWNER TO REVIEW EAVH CAMERA LOCATION, HEIGHT, ORIENTATION, AND VIEW.

TYPE	DESCRIPTION	MANFR.	CAT NO.	CAMERA INFORMATION				NOTES
				RESOLUTION	AUDIO RECORDING	MAX FRAME RATE	INFRARED	
F01C	FIXED DOME CAMERA, CEILING MOUNT	AXIS			No	30	Yes	REFER TO SECURITY TYPE SCHEDULE NOTE #1
F01W	FIXED DOME CAMERA, WALL MOUNT	AXIS			No	30	Yes	REFER TO SECURITY TYPE SCHEDULE NOTE #1
F02S	FIXED ELEVATOR CORNER CAMERA, CEILING MOUNT	AXIS			No	30	Yes	REFER TO SECURITY TYPE SCHEDULE NOTE #1
M01C	MULTIDIRECTIONAL(QUAD) DOME CAMERA, CEILING MOUNT	AXIS			No	30	Yes	REFER TO SECURITY TYPE SCHEDULE NOTE #1
M01L	MULTIDIRECTIONAL(QUAD) DOME CAMERA, POLE MOUNT	AXIS			No	30	Yes	REFER TO SECURITY TYPE SCHEDULE NOTE #1
M01N	MULTIDIRECTIONAL(QUAD) DOME CAMERA, CORNER MOUNT	AXIS			No	30	Yes	REFER TO SECURITY TYPE SCHEDULE NOTE #1
M02C	MULTIDIRECTIONAL(DUAL) DOME CAMERA, CEILING MOUNT	AXIS			No	30	Yes	REFER TO SECURITY TYPE SCHEDULE NOTE #1
M03W	180° PANORAMIC DOME CAMERA, WALL MOUNT	AXIS			No	30	Yes	REFER TO SECURITY TYPE SCHEDULE NOTE #1
P04W	PAN, TILT, ZOOM DOME CAMERA, WALL MOUNT	AXIS			No	30	Yes	REFER TO SECURITY TYPE SCHEDULE NOTE #1

LOW VOLTAGE SCOPE OF WORK

NOTES:...

1. RESPONSIBILITY MATRIX DELINEATES THE SCOPE OF WORK BETWEEN THE OWNER AND THE CONTRACTORS. CONTRACTORS ARE RESPONSIBLE TO COORDINATE BETWEEN EACH OTHER FOR THE FULL SCOPE OF WORK THEY ARE RESPONSIBLE FOR.
2. ADDITIONAL NOTES MAY BE PRESENT WITHIN THE CONTRACT DOCUMENTS INDICATING SPECIFIC EQUIPMENT PROVIDED BY OTHERS OR REQUIRE INSTALLATION BY SPECIFIC DIVISIONS.
3. INSTALLER PROVIDING THE SYSTEM CABLING SHALL PROVIDE THE CABLING, TERMINATION AND CERTIFICATION FOR A COMPLETE SYSTEM INSTALLATION, UNLESS OTHERWISE SPECIFICALLY NOTED WITHIN THE CONTRACT DOCUMENTS.
4. INSTALLER TO VERIFY WITH CONTRACT DOCUMENTS FOR THE CONNECTION TYPE (MALE OR FEMALE) REQUIRED FOR EACH SYSTEM.
5. REFER TO DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

LEGEND

AC	ACCESS CONTROL CONTRACTOR
AV	AUDIOVISUAL CONTRACTOR
DC	DOOR HARDWARE CONTRACTOR
EC	ELECTRICAL CONTRACTOR
FR	FURNITURE CONTRACTOR
GC	GENERAL CONTRACTOR
IC	INTRUSTION DETECTION CONTRACTOR
LVC	TELEPHONE/DATA CABLING CONTRACTOR
NIC	NOT IN CONTRACT
OWNER	OWNER
SC	VIDEO SURVEILLANCE CONTRACTOR
SPEC	SEE SPECIFICATIONS

DESCRIPTION	FURNISHED BY	INSTALLED BY
GENERAL		
(UPS) UNINTERRUPTIBULE POWER SUPPLIES	OWNER	OWNER
EQUIPMENT POWER (120V,208V,240V,277V,480V,ETC)	EC	EC
ROUGH OR FINISHED TRIM , CASE WORK, MILLWORK,EQUIPMENT RACKS & CABINETS, PEDESTALS, STRUCTURAL WORK FOR SPECIAL CONSTRUCTION.	GC	GC
STRUCTURAL BACKING AND SUPPORT FOR WALL MOUNTING EQUIPMENT	GC	GC
SUPPORT CABLES, PRE-CONSTRUCTION KITS, TILE BRIDGES, MANUFACTURE BACK BOXES, RACEWAY/PATHWAY & CONDUIT ROUGH-IN WITH NYLON PULLING TWINE, JUNCTION BOXES, FLOOR/CEILING BOX BOXES, NYLON BUSHINGS, FIRE-STOPPING, ETC.	EC	EC
EQUIPMENT RACKS,WIRE MANAGEMENT,PATCH PANELS,NETWORK EQUIPMENT(SERVERS,PoE SWITCHES,ROUTERS,ETC)WITHIN EF,ER,TR ROOMS	OWNER	OWNER
INSTALLATION OF CAT6 NETWORK CABLES AND FIBER OPTIC CABLES	LVC	LVC
SYSTEM PROGRAMMING ,TESTING AND TRANNING	AC / SC	AC / SC
TERMINATING AND TESTING CAT6 NETWORK AND FIBER CABLES	LVC	LVC
ACCESS CONTROL SYSTEM		
CREDENTIAL, CARD/BADGE PRINTER	OWNER	OWNER
ELECTRIFIED DOOR LOCKING HARDWARE	DC	DC
INSTALLATION OF ACCESS CONTROL CABLING	AC	AC
ACCESS CONTROL OPERATING SOFTWARE	AC	AC
TERMINATING AND TESTING OF THE ACCESS CONTROL CABLES	AC	AC
ACCESS CONTROL SYSTEM HEAD-END CONTROL PANEL(S) AND POWER SUPPLY(S)	AC	AC
CREDENTIAL CARDS, FOBS, TAGS, MOBILE	OWNER	OWNER
END DEVICES (E.G CREDENTAIL CARD READERS, DOOR POSITION SWITCHES, REQUEST TO EXIT MOTION, POWER TRASFER HINGE, DOOR RELEASE BUTTON, PANIC/DURESS BUTTON,PUSH TO EXIT BUTTON,ETC.)	AC	AC
INDIVIDUAL ACCESS CONTROL DOOR CONTROLLER(IF APPLICABLE)	AC	AC
OPERATING BASE STATION/WORK STATION EQUIPMENT (SERVER, MONITOR, KEYBOARD, MOUSE)	OWNER	OWNER
POWER SUPPLIES FOR ELECTRIFIED DOOR LOCKING HARDWARE	AC	AC
RECHARGABLE BACK-UP BATTERIES	AC	AC
AUDIOVISUAL		
ROUGH-IN - CONDUIT W/PULL STRING, JUNCTION BOXES, FLOOR BOXES, FLAT PANEL DISPLAY BACK BOXES, ETC.	EC	EC
SPECIALTY BACK BOXES, TILE BRIDGES, SUPPORT CABLES, PRECONSTRUCTION KITS, ETC. FOR AUDIOVISUAL COMPONENTS (TOUCH PANELS, LOUDSPEAKERS, KEYPADS, ETC.)	AV	AV
CATEGORY CABLE / FIBER OPTIC CABLE FROM DEVICE LOCATION TO TR(MDF)/ER(IDF) TERMINATED IN PATCH PANEL	LVC	LVC
CATEGORY CABLING FROM DEVICE TO DEVICE, NOT TERMINTATED IN PATCH PANELS WITHIN THE ER(MDF/TR(IDF)	AV	AV
COAXIAL CABLE	LVC	LVC
LIGHTING CONTROL SYSTEM INTERFACE DEVICE(S) AND CABLING TO AV CONTROL SYSTEM. TERMINATION INTO AV SYSTEM CONTROLLER BY AV INSTALLER	EC	EC
MOTORIZED SHADE CONTROL SYSTEM INTERFACE DEVICE(S) AND CABLING TO AV CONTROL SYSTEM. TERMINATION INTO AV SYSTEM	AV	AV
CUSTOM AUDIOVISUAL CONNECTOR INSERT PLATE FOR FLOOR BOXES AND/OR WALL PLATES	AV	AV
EQUIPMENT RACKS NOT WITHIN THE ER(MDF)/TR(IDF) FOR SYSTEM COMPONENTS	AV	AV
FURNITURE BOX TABLE CUTTING	GC	GC
FURNITURE BOXES WITH AUDIOVISUAL CONNECTIONS AND/OR CABLES	AV	AV
PROJECTOR SCREEN MANUAL AND/OR MOTORIZED HOUSING	AV	AV
PROJECTOR SCREEN MANUAL AND/OR MOTORIZED ROLLER	AV	AV
PROJECTOR SCREEN, FIXED FRAME (SIMILAR TO WHITEBOARD)	GC	GC
FLAT PANEL MONITOR MOUNTS	OWNER	AV
FLAT PANEL MONITORS	OWNER	AV
INSTRUCTOR'S LECTERNS/CONSOLES WITH INTEGRATED AUDIOVISUAL SYSTEMS COMPONENTS	AV	AV
INTERACTIVE FLAT PANEL MONITORS AND MOUNTS (WALL MOUNTED)	OWNER	AV
INTERACTIVE MOBILE CART ASSEMBLY	OWNER	OWNER
NETWORK SWITCHES WITHIN THE ER(MDF)/TR(IDF) FOR AUDIOVISUAL NETWORK, AUDIO, CONTROL AND VIDEO	OWNER	OWNER
VIDEO PROJECTOR	AV	AV
VIDEO PROJECTOR MOUNTS	AV	AV
INTRUSION DETECTION SYSTEM (BURGLAR ALARM)		
ANY INTRUSION DETECTION WIRELESS EQUIPMENT (TRANSMITTERS, RECEIVERS, REPEATERS, ETC.)	IC	IC
CELLULAR BACKUP COMMUNICATION DEVICE	IC	IC
END DEVICES (E.G. ; DOOR CONTACTS, GARAGE CONTACTS, ROOF HATCH CONTACTS, MOTION SENSORS, TEMPERATURE/MOISTURE/LEAK SENSORS, ETC.)	IC	IC
INTERIOR/EXTERIOR SIRENT AND/OR STROBES	IC	IC
INTRUSION DETECTION HEAD-END CONTROL PANEL AND SLAVE PANELS	IC	IC
INTRUSION DETECTION KEYPADS (ARM/DISARM)	IC	IC
INTRUSION DETECTION LOW VOLTAGE CABLING	IC	IC
RECHARGABLE BACK-UP BATTERIES	IC	IC
TERMINATING AND TESTING LOW VOLTAGE CABLES	IC	IC
TELEPHONE / DATA		
ROUGH-IN - CONDUIT W/PULL STRING, JUNCTION BOXES, FLOOR BOXES, FLAT PANEL DISPLAY BACK BOXES, ETC.	EC	EC
CATEGORY CABLE / FIBER OPTIC CABLE	LVC	LVC
PATCH CABLES FOR DEVICES WITHIN THE TR/ER FOR CONNECTION BETWEEN PATCH PANELS AND NETWORK SWITCHES	LVC	LVC
TERMINATE CABLE (PATCH PANEL AND DATA PORT), INCLUDING TESTING	OWNER	OWNER
CUSTOM TELECOMMUNICATIONS CONNECTOR INSERT PLATE FOR FLOOR BOXES AND/OR WALL PLATES	EC	EC
DATA SWITCHES, SERVERS, FIREWALL, ETC	OWNER	OWNER
EQUIPMENT RACKS WITHIN THE ER(MDF)/TR(IDF) FOR SYSTEM COMPONENTS	LVC	LVC
RACK MOUNT UPS, POWER DISTRIBUTION UNIT (PDU)	LVC	LVC
WIRELESS ACCESS POINTS	OWNER	OWNER
VIDEO & CAMERA SURVEILLANCE SYSTEM		
CAMERA ETHERNET EXTENDERS, PoE INJECRORS, POWER SUPPLIES		
(NVR) NETWORK VIDEO RECORDER	OWNER	SC
(VMS) VIDEO MANAGEMENT OPERATING SOFTWARE	OWNER	SC
IP CAMERA LICENSES	OWNER	SC
SURVEILLANCE IP CAMERA MOUNTS AND MOUNTING HARDWARE	OWNER	SC
VIDEO ANALYTIC SOFTWARE & LICENSING	OWNER	SC
128 GB MICRO SDXC CARD FOR SURVEILLANCE IP CAMERAS	OWNER	SC
OPERATING BASE STATION AND WORK STATION EQUIPMENT (SERVER, MONITOR, KEYBOARD, MOUSE)	OWNER	OWNER
POWER SURGE & SUPRESSION EQUIPMENT	OWNER	SC
SURVEILLANCE IP CAMERAS	OWNER	SC

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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ELECTRICAL SYMBOLS, SCHEDULES, AND NOTES

E004

11/6/2023 8:58:01 PM

ELECTRICAL SITE UTILITY COORDINATION

ELECTRICAL SITE UTILITY INFORMATION HAS BEEN COORDINATED WITH THE FOLLOWING UTILITY COMPANY REPRESENTATIVES. VERIFY ALL LOCATIONS, DIMENSIONS, CLEARANCES, REGULATIONS, ETC., PRIOR TO INSTALLATION. NOTIFY ENGINEER OF ANY REVISIONS REQUIRED.

POWER COMPANY	ROCKY MOUNTAIN POWER
CONTACT	JACE HILTON
PHONE NO.	801-629-4303
EMAIL	jace.hilton@rockymountainpower.net
WORK ORDER NO.	#7046687 (DEMO) #7151966 (SITE)
TELECO COMPANY	LUMEN
CONTACT	TERESA HINTON
PHONE NO.	801-661-7041
EMAIL	teresa.hinton@lumen.com

GENERAL SITE PLAN NOTES

1. DIVISION 26 SHALL VISIT THE SITE PRIOR TO BIDDING. BIDS SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS. BIDDERS SHALL EXAMINE THE SITE AND THE COMPLETE SET OF PLANS AND SPECIFICATIONS COVERING THE ENTIRE PROJECT. THEY SHALL BECOME FULLY CONVERSANT WITH THE TYPE OF GENERAL CONSTRUCTIONS AS WELL AS ALL PERTINENT FACTS AFFECTING THE COST OF CARRYING OUT THE WORK THEY WILL CONTRACT TO PERFORM. DIVISION 26 SHALL COORDINATE PROJECT PHASING WITH GENERAL CONTRACTOR AND BID AND PERFORM RESPONSIBILITIES FOR THIS PROJECT TO CONTRACT EXPECTATIONS.
2. MAINTAIN AND PROTECT EXISTING UTILITY SERVICES AND ELECTRIFIED EQUIPMENT FOR EXISTING FACILITIES. COORDINATE REQUIRED DISRUPTION OF THESE SERVICES WITH OWNER PRIOR TO DISCONNECTING. PROVIDE TEMPORARY UTILITY SERVICES TO KEEP FACILITIES IN OPERATION DURING UTILITY RELOCATION INCLUDING BUT NOT LIMITED TO FIRE WATCHES, ELECTRICAL GENERATORS, ETC.
3. ANY ELECTRICAL ROUGH-IN, EQUIPMENT AND CONDUIT PATHWAYS ARE DIAGRAMMATICALLY SHOWN ON THE DRAWINGS. FINAL ROUTING OF THE CONDUITS, CIRCUITING, AND CABLING SHALL BE DETERMINED BY THE CONTRACTOR. DIVISION 26 SHALL BLUE STAKE THE AREA OF NEW CONSTRUCTION PRIOR TO EXCAVATION FOR FOOTINGS, ETC. IDENTIFY BURIED ELECTRICAL SYSTEMS(UTILITIES, POWER, COMMUNICATIONS, ETC.) AND COORDINATE LOCATIONS WITH THE GENERAL CONTRACTOR. IF EXISTING ELECTRICAL SYSTEMS ARE DISTURBED (POWER,AUXILIARY, ETC.) E.C. SHALL MAKE NECESSARY REPAIRS (AS APPROVED BY DISTRICT REPRESENTATIVE) AS PART OF THIS CONTRACT.
4. CONTRACTOR TO CLOSELY COORDINATE ALL NEW AND EXISTING DEVICE LOCATIONS WITH CIVIL DRAWINGS. CONTRACTOR TO VERIFY ALL FINAL GRADE REQUIREMENTS WITH CIVIL DRAWINGS.
5. CLOSELY COORDINATE ANY REQUIRED POWER SHUTDOWNS WITH THE GENERAL, HEAD CUSTODIAN, AND OWNER.
6. ELECTRICAL UTILITY SERVICE FROM ROCKY MOUNTAIN POWER (RMP) HAS BEEN GENERALLY COORDINATED AND GENERAL DIRECTION GIVEN HEREIN. DIVISION 26 RESPONSIBLE FOR COMPLETELY COORDINATING THE EXACT PATHWAYS AND REQUIREMENTS WITH RMP PRIOR TO ROUGH-IN. PROVIDE FIBERGLASS LONG RADIUS SWEEPS FOR ALL SFCP CONDUITS. COORDINATE ALL ROUGH-IN AND INSTALLATION REQUIREMENTS WITH LATEST SFCP ELECTRICAL SERVICE REQUIREMENTS AND CONTACT PERSON PROVIDED ON PLAN ALL NEW DEVELOPMENTS WILL BE SERVICED UNDERGROUND; CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL UNDERGROUND CONDUIT, SECONDARY CONDUCTORS, TRANSFORMER PADS, AND SECONDARY BOXES. THE UNDERGROUND ELECTRICAL DISTRIBUTION LAYOUT SHALL BE COMPLETED OR APPROVED BY RMP ENGINEERING DIVISION.
7. TELCO UTILITY SERVICE FROM LUMENS NETWORK (LN) HAS BEEN GENERALLY COORDINATED AND GENERAL DIRECTION GIVEN HEREIN. DIVISION 26 IS RESPONSIBLE FOR COMPLETELY COORDINATING THE EXACT PATHWAYS AND REQUIREMENTS WITH PROVIDERS AND OWNERS PRIOR TO ROUGH-IN. PROVIDE FIBERGLASS LONG RADIUS SWEEPS FOR ALL CONDUITS. COORDINATE ALL ROUGH-IN AND INSTALLATION REQUIREMENTS WITH CONTACT PERSON PROVIDED ON PLANS. VERIFY ALL EQUIPMENT LOCATIONS ON AND OFF THE SITE NECESSARY FOR SERVICE CONNECTION.
8. TRENCHING AND BACKFILL: LOCATE AND PROTECT EXISTING UTILITIES AND OTHER UNDERGROUND WORK IN A MANNER THAT WILL ENSURE THAT NO DAMAGE OR SERVICE INTERRUPTIONS WILL RESULT FROM EXCAVATING AND BACKFILLING. PERFORM EXCAVATION IN A MANNER THAT PROTECTS WALLS, FOOTINGS, AND OTHER STRUCTURAL MEMBERS FROM BEING DISTURBED OR DAMAGED IN ANY WAY. BURIAL DEPTHS MUST COMPLY WITH NEC SECTION 300-5 (OR STATE OF UTAH REQUIREMENTS, WHICHEVER IS MORE STRINGENT), UNLESS NOTED OTHERWISE. PATCH AND REPAIR ROADS, PARKING AREAS, SIDEWALKS, CURBS, OTHER PAVED AREAS, PLANTING AND ANY OTHER DISTURBED AREAS CAUSED BY THE ELECTRICAL CONTRACTOR DURING CONSTRUCTION.
9. BORING, TRENCHING, ASPHALT CUTTING AND PATCHWORK BY DIVISION 26. ANY CONCRETE THAT NEEDS TO BE REMOVED TO COMPLETE WORK WILL BE THE RESPONSIBILITY OF DIVISION 26. SCHEDULING OF THE TRENCHING SHALL BE COORDINATED WITH OTHER TRADES AND APPROVED BY THE OWNER.
10. CABLE RUNS SHALL BE MARKED WITH RED PLASTIC MARKING TAPE INSTALLED IN THE TRENCH ONE FOOT BELOW SURFACE. BACKFILL SHALL BE FREE OF ROCKS AND OTHER OBJECTS WHICH MIGHT DAMAGE THE CABLE.
11. TRENCHING, ASPHALT CUTTING AND PATCHWORK BY DIVISION 26. ANY CONCRETE THAT NEEDS TO BE REMOVED TO COMPLETE WORK WILL BE THE RESPONSIBILITY OF DIVISION 26. SCHEDULING OF THE TRENCHING AND INSTALLATION OF CABLE SHALL BE COORDINATED WITH OTHER TRADES AND APPROVED BY THE OWNER.
12. INSPECT ALL CONDUIT(S) WITH CAMERA TO CONFIRM THAT CONDUIT(S) HAVE NOT BEEN CRUSHED OR BROKEN. CAP OPEN ENDS OF CONDUITS AND INSTALL A 200 LB. NYLON PULL CORD IN EACH EMPTY CONDUIT RUN.
13. PROVIDE PLANS, PHOTO DOCUMENTATION AND GPS COORDINATES INDICATING THE LOCATION OF ANY AND ALL CONDUITS INTENDED FOR FUTURE USE BY OWNER. SUBMIT DOCUMENTATION WITH OAMs.
14. VERIFY LOCATION OF LIGHT POLES WITH THE OWNER AND ARCHITECT PRIOR TO ROUGH-IN. PROVIDE HAND-RUBBED FINISHES FOR ALL SITE POLES. REFER TO DIAGRAM C003/E102 FOR ADDITIONAL INFORMATION.
15. CONTRACTOR TO PROVIDE PULL BOXES AS REQUIRED PER NEC AND NECESSARY TO PROVIDE SUCCESSFUL CABLE PULLS.
16. PROVIDE TEMPORARY POWER FOR PROJECT AS REQUIRED BY GENERAL CONTRACTOR.
17. LABEL ALL ELECTRICAL GEAR WITH BOTH CONSTRUCTION DRAWING-ROOM #S AND FINAL CONSUMER ROOM #'S.

SHEET KEYNOTES

E1 PROVIDE (2) 4" CONDUITS WITH (4) 1" SMOOTHWALL INNERDUCT EACH FROM HANDHOLE FOR LUMEN SERVICES. FIELD COORDINATE EXACT 'MEET-ME' POINT WITH LUMEN PRIOR TO ROUGH-IN. UTILIZE LONG ELBOWS AND SWEEPS FOR ALL CONDUIT TRANSITIONS. COORDINATE WITH LUMEN AND OWNER FOR EXACT DEMARCATION LOCATION. DEMARCATION TO BE LOCATED ON A SECTION OF THE PLYWOOD WALL BOARD. LOCATE DEDICATED 4-PLEX RECEPTACLE NEAR LUMEN DEMARCATION.

E2 PROVIDE (2) 4" CONDUITS WITH (4) 1" SMOOTHWALL INNERDUCT EACH FROM HANDHOLE. LABEL CONDUIT AS "FOR FUTURE USE".

E3 PROVIDE (2) UNDERGROUND JUNCTION BOXES NEAR MARQUEE SIGN. FIELD COORDINATE EXACT LOCATION WITH LANDSCAPE AND CIVIL DRAWINGS. PROVIDE (2) 2" CONDUITS FROM JUNCTION BOX TO PANEL '1LA2' WITHIN RECORDS 1107 FOR INDICATED BRANCH CIRCUITS. CONDUCTORS UPSIZED FOR VOLTAGE DROP. PROVIDE REDUCERS OR POLARIS LUGS AS NEEDED. PROVIDE (1) 1-1/2" CONDUIT WITH 6 STRAND, OSP RATED, OS2 FIBER FROM JUNCTION BOX TO TELECOM 1332 FOR FUTURE DATA CONNECTION TO MARQUEE SIGN. LABEL CONDUITS "MARQUEE SIGN" FEED FOR POWER AND FIBER TO MARQUEE. COORDINATE STUB UP LOCATIONS WITHIN MARQUEE SIGN BASE WITH MARQUEE SHOP DRAWINGS AND ARCHITECTURAL DETAIL C1/AS810.

E4

E5 EXISTING UNDERGROUND FIBER LINE TO BE ABANDONED. COORDINATE EXISTING ROUTING CLOSELY AND CONFIRM EXISTING CONDUIT IS NOT BEING UTILIZED BY TELCO COMPANIES WITHIN THE AREA.

E9 PROVIDE ELECTRICAL ROUGH-IN FOR POLE MOUNTED CAMERA. ROUTE POWER AND DATA CIRCUITS/CONDUITS THROUGH CONCRETE UNDERGROUND JUNCTION BOX (L003/E401) AND LOCATE NEAR SITE POLE BASE. COORDINATE FACTORY INSTALLED LIGHT POLE CAMERA/WAP PASS THRU NIPPLE ELEVATION WITH POLE MANUFACTURER. PROVIDE EQUIPMENT, 120V CIRCUIT, FIBER MEDIA CONVERTER, AND 6 STRAND OSP OS2 NETWORK CABLE AND TERMINATIONS AS SHOWN AND PER DIAGRAM EY118/E401. ROUTE TELECOM PATHWAY AND CABLING TO NEAREST TELECOM ROOM UNLESS OTHERWISE NOTED. PROVIDE FACTORY LIGHT POLE PORTS FOR ENTERING AND EXITING LIGHT POLE.

E10 PROVIDE NEW RMP GROUNDSLEEVE. COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ROCKY MOUNTAIN POWER. VAULT/PAD BY DIV. 26. INTERCEPT AND REWORK EXISTING RMP CONDUIT SERVING THE EXISTING SWITCHGEAR TO FIRST ENTER THE NEW GROUND SLEEVE BEFORE CONTINUING TO EXISTING SWITCHGEAR. PROVIDE A NEW 6" CONDUIT BETWEEN NEW GROUNDSLEEVE AND EXISTING SWITCHGEAR.

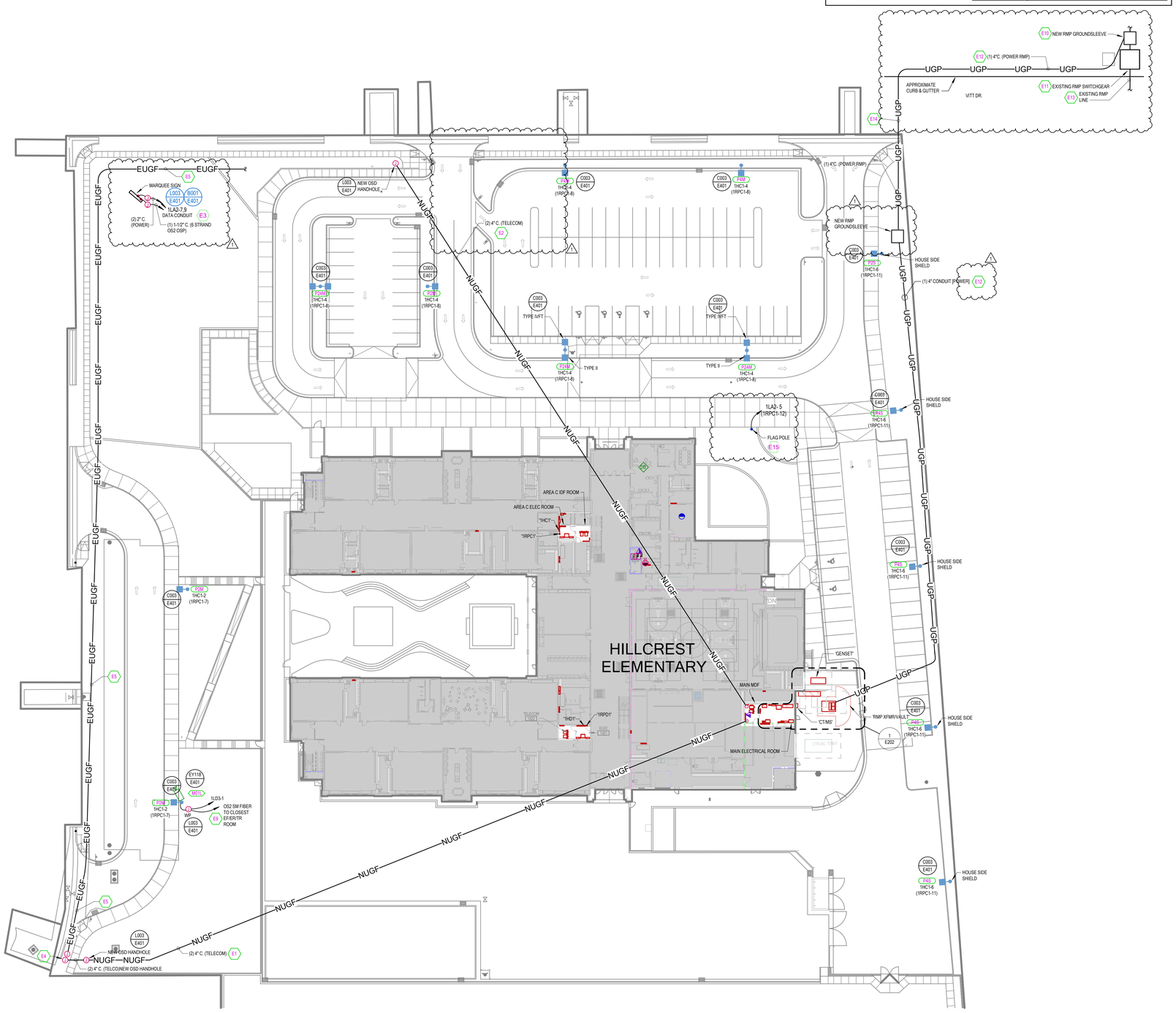
E11 EXISTING RMP SWITCHGEAR. EXISTING UNDERGROUND FEEDER TO BE INTERRUPTED AND REWORKED BACK INTO EXISTING SWITCHGEAR. COORDINATE TIMING AND INSTALLATION REQUIREMENTS CLOSELY WITH ROCKY MOUNTAIN POWER.

E12 PROVIDE (1) 4" CONDUIT BETWEEN NEW RMP GROUND SLEEVE AND NEW UTILITY TRANSFORMER. PROVIDE ALL NECESSARY BORING, TRENCHING, BACKFILL, ETC. PER ROCKY MOUNTAIN POWER REQUIREMENTS.

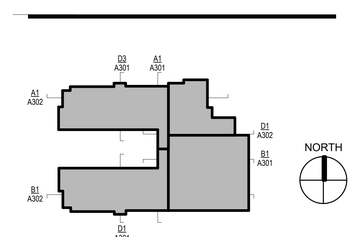
E13 EXISTING RMP CONDUIT TO BE MAINTAINED IN PLACE.

E14 DIV. 26 TO PROVIDE DIRECTION BORING AS REQUIRED ACROSS VITT DRIVE.

E15 INTEGRAL FLAG POLE LIGHT. FIELD COORDINATE EXACT LOCATION WITH LANDSCAPE DRAWINGS, ARCHITECT, AND OWNER PRIOR TO ROUGH IN. VERIFY ROUGH-IN AND TERMINATION REQUIREMENTS WITH MANUFACTURER'S SHOP DRAWINGS.



ELECTRICAL SITE PLAN
SCALE = 1" = 30'-0"



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1	11/15/23	Addendum #1

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ELECTRICAL SITE PLAN

E101

11/17/2023 11:26:06 AM

GENERAL SHEET NOTES

1. NOT EVERY INSTANCE OF REQUIRED ELECTRICAL DISTRIBUTION OR TELECOM EQUIPMENT HAVE BEEN INCLUDED WITHIN OVERALL DRAWINGS. GEAR AND EQUIPMENT LOCATIONS ARE DIAGRAMMATICALLY SHOWN AND ARE TO SERVE AS REFERENCE ONLY. REFER TO COMPLETE DRAWINGS AND SPECIFICATIONS FOR MORE INOFRMATION.
2. SUBMIT DIMENSIONED DRAWINGS OF ALL ELECTRICAL AND TELECOM ROOMS BASED UPON ACTUAL BID SELECTED MANUFACTURER EQUIPMENT. SHOW PLAN VIEW OF EQUIPMENT WITH DIMENSIONED CLEARANCES TO PROXIMATE EQUIPMENT. FAILURE TO SUBMIT SAID PLAN VIEW SHALL NOT RELIEVE CONTRACTOR OF RESPONSIBILITY TO VERIFY REQUIRED CLEARANCES BEFORE RELEASE OF EQUIPMENT FOR FABRICATION. CONTRACTOR MAY REARRANGE EQUIPMENT WITH ROOM AS NEEEDED TO HELP ACHIEVE OPTIMAL LAYOUT OF EQUIPMENT.
3. FINAL ROUTING OF THE CONDUITS, CIRCUITING, AND CABLING SHALL BE DETERMINED BY THE CONTRACTOR.
4. REFER TO APPENDIX B FOR DA/ERRCS DESIGN. PROVIDE BOTH PATHWAYS,POWER,ETC REQUIRED FOR DAS SYSTEM DEPLOYMENT DIVISION 26 RESPONSIBLE FOR COORDINATING FINAL PATHWAYS AND INFRASTRUCTURE REQUIRED FOR ERRCS SYSTEM INSTALLATION.
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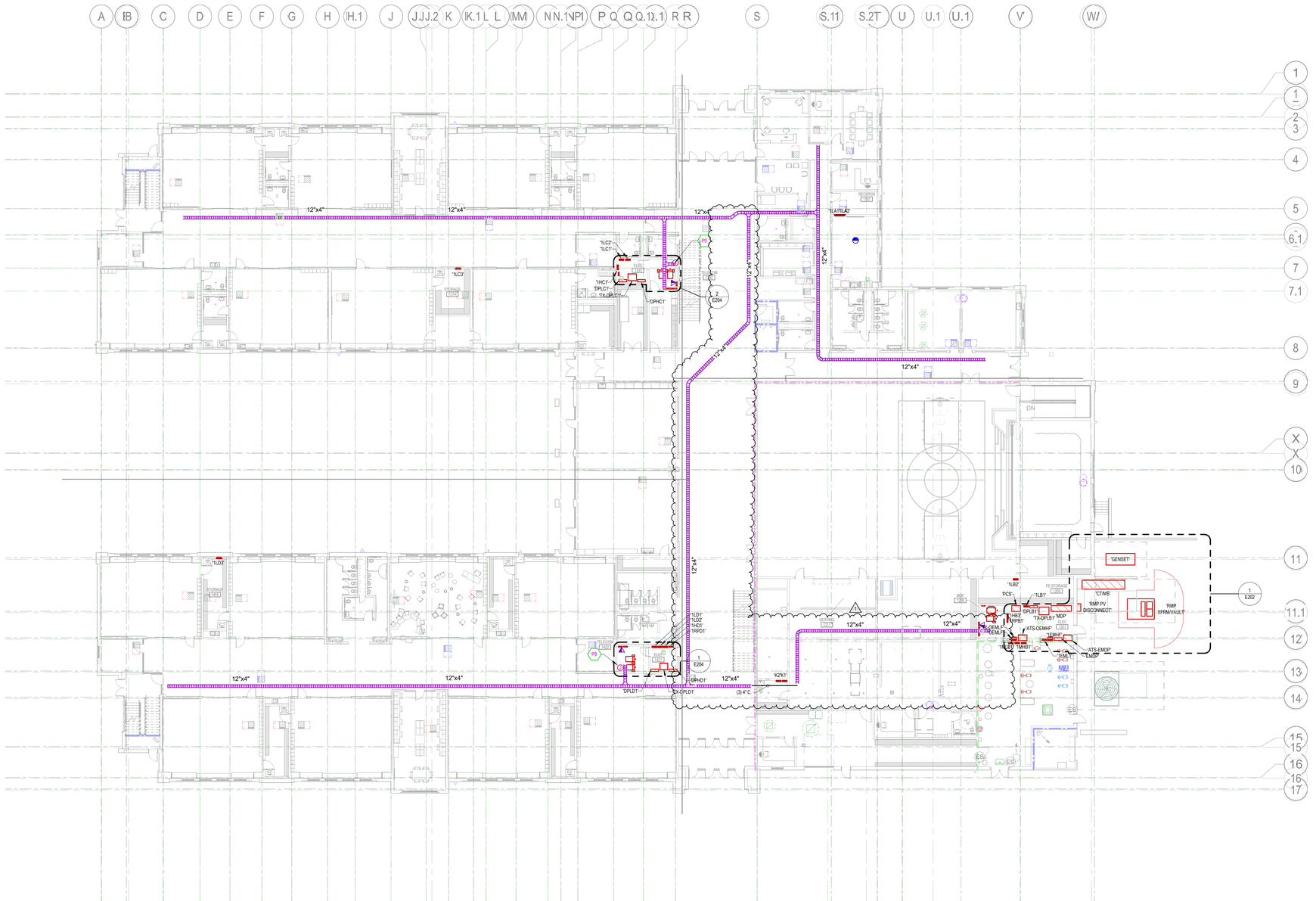
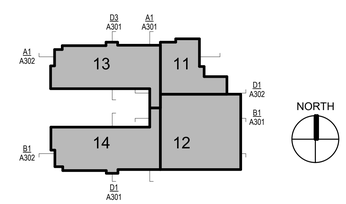
SHEET KEYNOTES

P9 PROVIDE A MINIMUM OF (4) 4" CONDUIT PASS THRU'S BETWEEN MAIN FLOOR DATA ROOM AND CABLE TRAY FROM LEVEL 2. PROVIDE ADDITIONAL CONDUIT SLEEVES AS NECESSARY IF FILL CAPACITIES ARE EXCEEDED. MAINTAIN (1) SPARE 4" CONDUIT FOR FUTURE USE ONLY.



LEVEL 01 ELECTRICAL DISTRIBUTION PLAN
SCALE = 1/16" = 1'-0"



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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 ELECTRICAL DISTRIBUTION PLAN

E104

11/16/2023 2:25:16 PM

GENERAL SHEET NOTES

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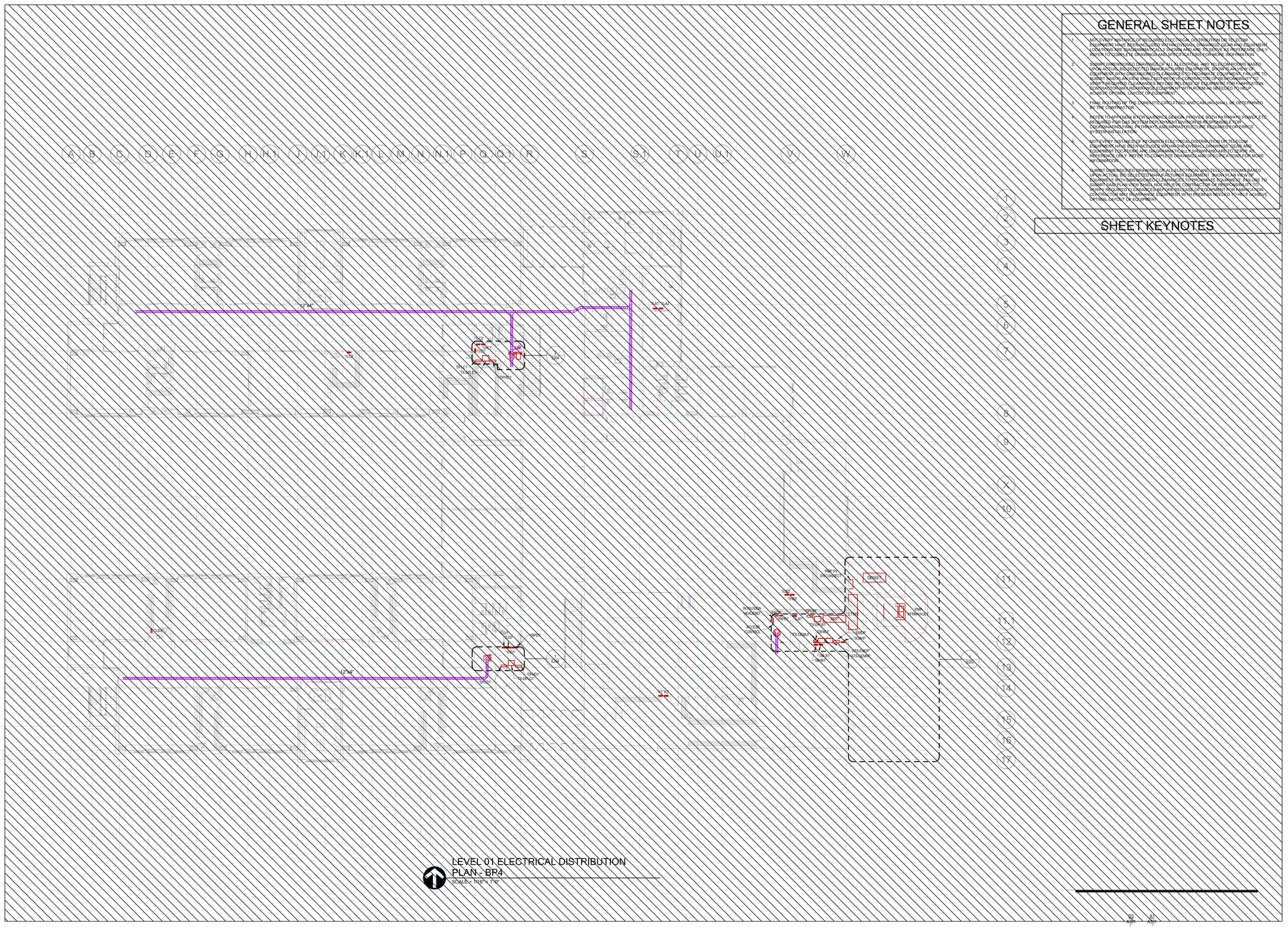
SHEET KEYNOTES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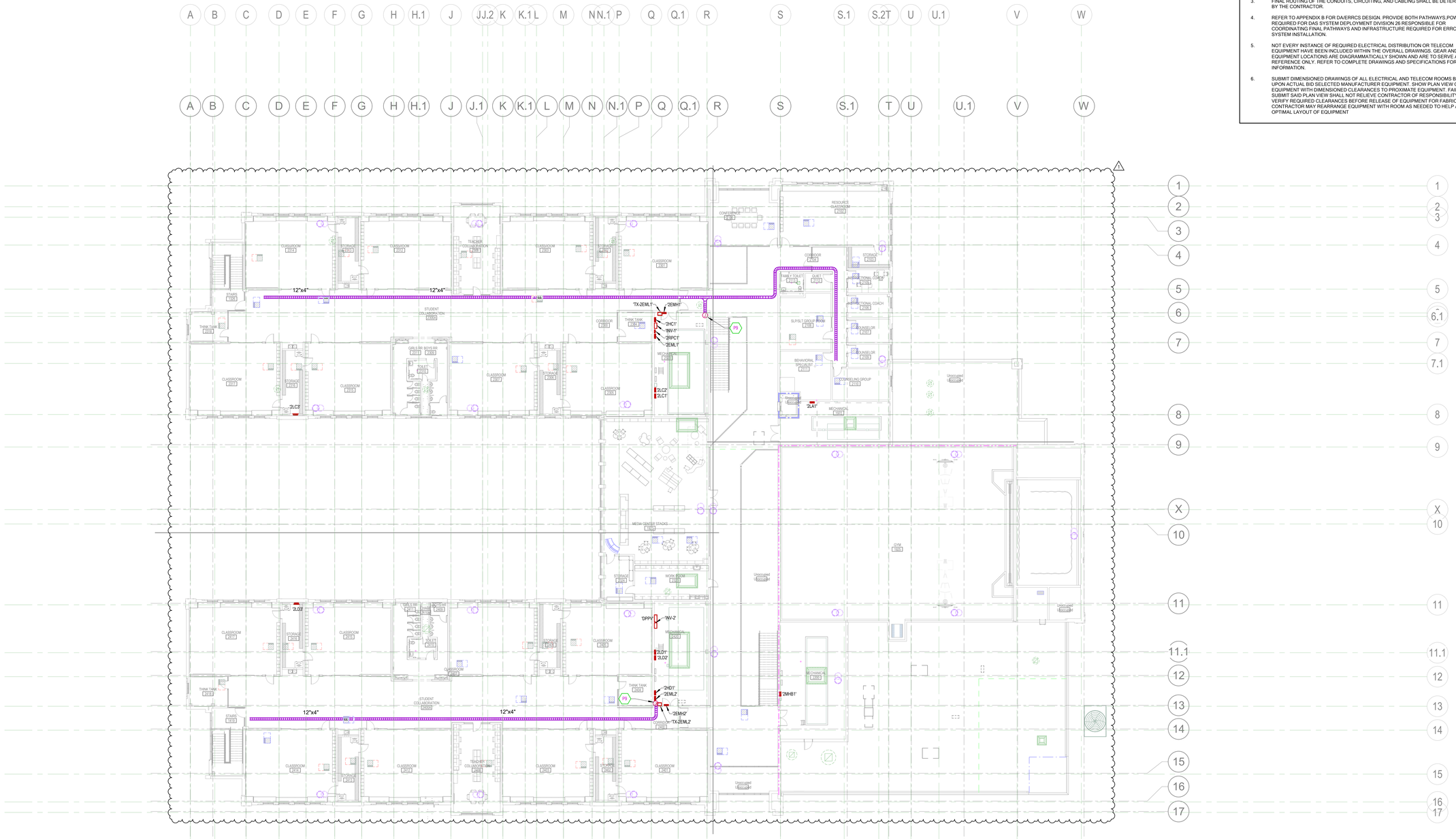
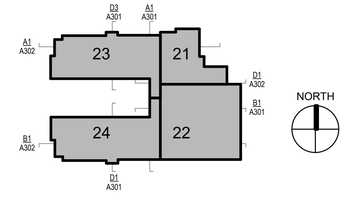


LEVEL 02 ELECTRICAL DISTRIBUTION PLAN
SCALE = 1/16" = 1'-0"



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OSD HILLCREST ELEMENTARY REBUILD

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BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 ELECTRICAL DISTRIBUTION PLAN

E105

11/16/2023 2:25:23 PM

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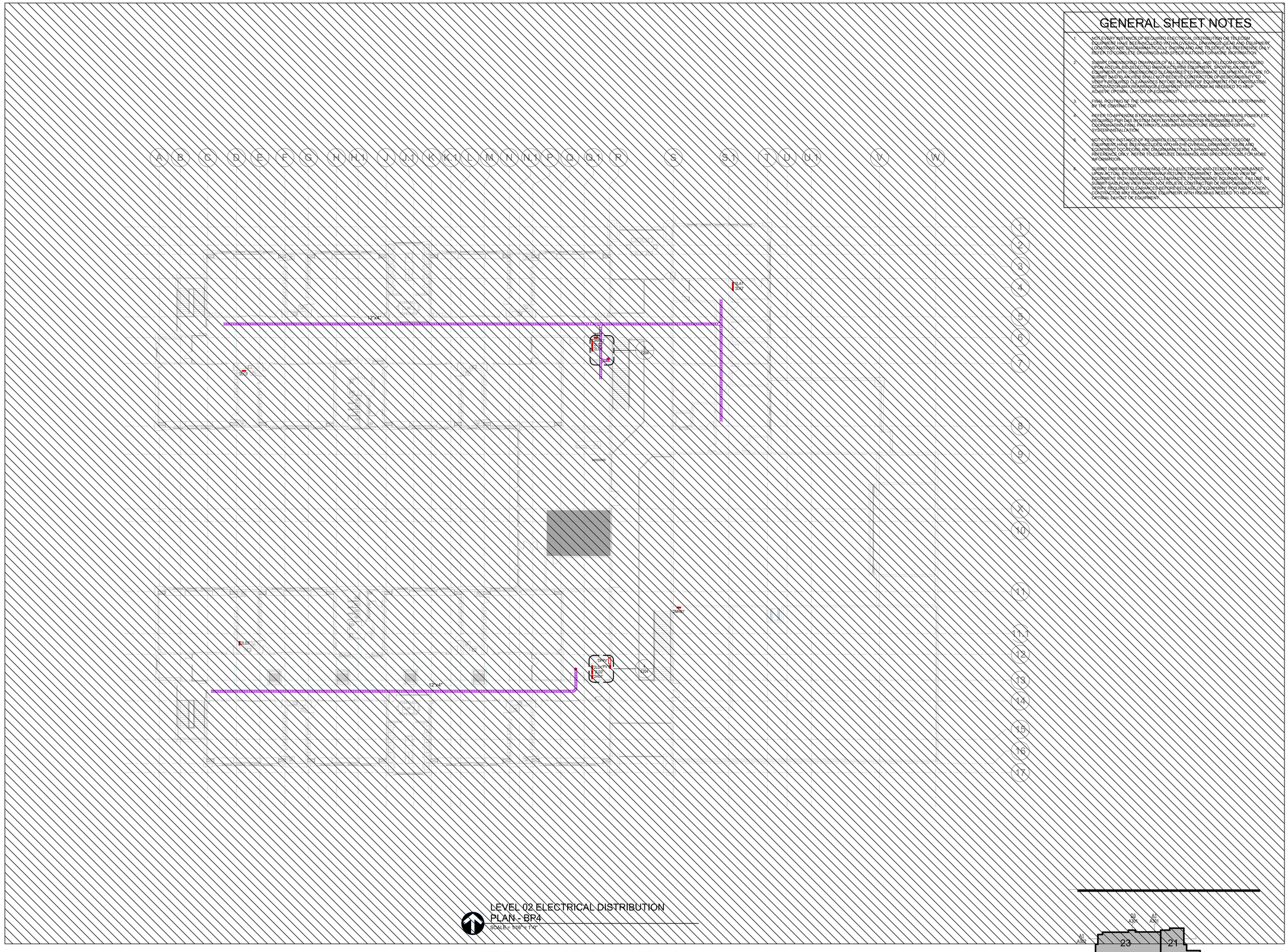
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LIGHTING SHEET NOTES

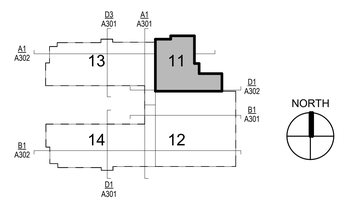
1. DEVICE HEIGHTS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL ROUGH-IN ELEVATION HEIGHTS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUGH-IN DEVICES 6" ABOVE DESKTOPS,COUNTERS, ETC.
2. REFFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. FOR AREAS WITHOUT CEILINGS, FIXTURE LOCATIONS ARE DIAGRAMMATIC. THE INTENT IS TO ALIGN, CENTER, OR SPACE FIXTURES BETWEEN ARCHITECTURAL AND STRUCTURAL ELEMENTS.. CONTRACTOR TO PAINT EXPOSED RACEWAY TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY EXACT FIXTURE LENGTHS FOR CONTINUOUS ILLUMINATION FOR COVES AND LINEAR RUNS. PROVIDE CONTINUOUS ILLUMINATION WITH NO MORE THAN A 1" GAP BETWEEN THE END OF THE EDGE OF THE WALL / CEILING AND THE FIXTURE
4. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR PLACEMENT OF FIXTURES WITHIN MECHANICAL ROOMS.
5. ALL ROOM CONTROLLERS AND/OR POWER PACKS SHALL BE INSTALLED IN THE CEILING SPACE DIRECTLY ABOVE THE ENTRY DOOR TO THE SPACE IT IS CONTROLLING.
6. SEE CORRESPONDING LIGHTING DIAGRAMS FOR GENERAL INSTALLATION.
7. REQUIREMENTS, CONNECTIONS, AND CABLE TYPES.
8. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO ALL EMERGENCY POWER CONTROL DEVICES FOR PROPER POWER SENSING.
9. PROVIDE UNSWITCHED HOT AHEAD OF RELAY, OCCUPENCY SENSOR, OR SWITCH TO ALL EXIT SIGNS.
10. IF SHOWN, SUBSCRIPT NEAR LIGHT FIXTURES INDICATES CONTROL INTENT. PROVIDE LIGHTING CONTROLLERS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS NEEDED
11. PROVIDE 0-10V DIMMING FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE WALLSTATION CONTROL SEQUENCE AND OR BY TYPE OF CONTROL INTERFACE SHOWN.
12. ALL 277V LIGHTING CIRCUITS TERMINATING AT LIGHTING CONTROL PANELS SHALL HAVE A MINIMUM LENGTH OF 20 FEET BETWEEN LIGHTING CONTROL PANEL AND BRANCH LIGHTING PANEL.
13. CAREFULLY COORDINATE FIXTURE PLACEMENT WITHIN BAFFLED CEILINGS. PENDANT MOUNTING FIXTURE SHALL BE MOUNTED AT THE SAME ELEVATION AS BAFFLES. COORDINATE WITH ARCHITECTURAL RCP AND DETAILS PRIOR TO ROUGH-IN.
14. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
15. ALL UNDERCABINET LIGHTS MUST BE COORDINATED WITH MILLWORK FOR EXACT LENGTHS. COORDINATE WITH MILLWORK SHOP DRAWINGS.
16. PROVIDE 0-10V DIMMER CONDUCTORS FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE RELAY PANEL SCHEDULE, WALL STATION CONTROL SEQUENCE,, OR REQUIRED BY IECC 2021.
17. SUBSCRIPT ADJACENT TO LIGHT FIXTURE INDICATES INTENDED CONTROL GROUPING. PROVIDE LIGHTING CONTROLS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS. PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS REQUIRED.
18. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURE'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

SHEET KEYNOTES

L17	PROVIDE A TOTAL OF (3) EH FIXTURES. MOUNT AND SPACE EVENLY THROUGHOUT THE ELEVATOR SHAFT. PROVIDE SWITCH CONTROL AS REQUIRED.
L18	CIRCUIT EXTERIOR DUPLEX OUTLET THROUGH AREA RELAY PANEL. EXTERIOR OUTLETS CONTROLLED VIA LOW VOLTAGE CONTROL SWITCH 'RCO' AND PROGRAMMED PER OWNER REQUIREMENTS.
L19	PROVIDE EXTENDED RANGE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN THROUGHOUT CORRIDORS. PROVIDE 0-10V DIMMING ON ALL CORRIDOR LIGHTING RELAYS. OCCUPANCY SENSOR SHALL DIM CORRIDOR RELAY TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. LOCATE OCCUPANCY SENSOR SENSOR(S) PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.
L21	PROVIDE 7" LIGHTING TOUCH PANEL THAT IS TIED TO THE BUILDING LIGHTING RELAY PANELS THROUGHOUT THE BUILDING. PROVIDE EASY TO USE GUI INTERFACE, PROGRAM GUI WITH PAGES TO CONTROL AND OVERRIDE BUILDING RELAYS E.G. EXTERIOR, PARKING, CORRIDORS, ETC. RECEIVE SIGN-OFF ON SETUP AND OVERALL FUNCTIONALITY.

LEVEL 01 - LIGHTING RCP - AREA 11
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - LIGHTING PLAN - AREA 11

E111.1

11/6/2023 6:58:21 PM

POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.

SHEET KEYNOTES

P3 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR VAV CONTROL TRANSFORMER. CONTROLS CONTRACTOR TO MAKE CONNECTION TO CONTROL TRANSFORMER AND VAV BOXES. COORDINATE EXACT LOCATION OF JUNCTION BOXES WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.

P4 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE/SMOKE DAMPERS. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.

P5 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE SEPARATION AREAS AND DOOR HOLD OPENS. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLY, HOLD OPENS, KEY SWITCHES, ACCESS CONTROL, AND FIRE ALARM SYSTEM. COORDINATE WITH DOOR HARDWARE SUPPLIER AND FIRE ALARM CONTRACTOR FOR ADDITIONAL INFORMATION.

P6 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR DOOR HARDWARE EQUIPMENT E.G. ADA. POWER SUPPLIES, ETC. WIRE COMPLETELY TO ALL POWER AND ACCESS CONTROL RELATED DOOR HARDWARE EQUIPMENT. COORDINATE EXACT LOCATION OF JUNCTION BOXES WITH DOOR HARDWARE CONTRACTOR PRIOR TO ROUGH-IN.

P8 OUTLET CONTROLLED THROUGH RELAY PANEL/CORRIDOR LIGHTING RELAY CONTROL SYSTEM VIA LOW VOLTAGE WALLSTATION "EXT OUT." "EXT. OUT" WALLSTATIONS LOCATED WITHIN RECEPTION 1102, SOUTH EAST GYMNASIUM SWITCHING CABINET, AND CUSTODIAL OFFICE 1223.

P10 LOCATE IN KNEE SPACE. COORDINATE EXACT LOCATION OF KNEE SPACE WITH ARCHITECTURAL ELEVATIONS AND MILLWORK DRAWINGS PRIOR TO ROUGH-IN.

P34 PROVIDE DISPLAY BOX AND ASSOCIATED ELECTRICAL ROUGH-IN AS SHOWN. COORDINATE DISPLAY BOX LOCATION AND HEIGHT WITH OWNER PROVIDED MOUNT AND INTERACTIVE DISPLAY PRIOR TO ANY ROUGH-IN. BOX SHALL BE MOUNTED BETWEEN PLYWOOD DISPLAY BACKING. SEE TA SERIES OF DRAWINGS FOR ADDITIONAL REQUIREMENTS.

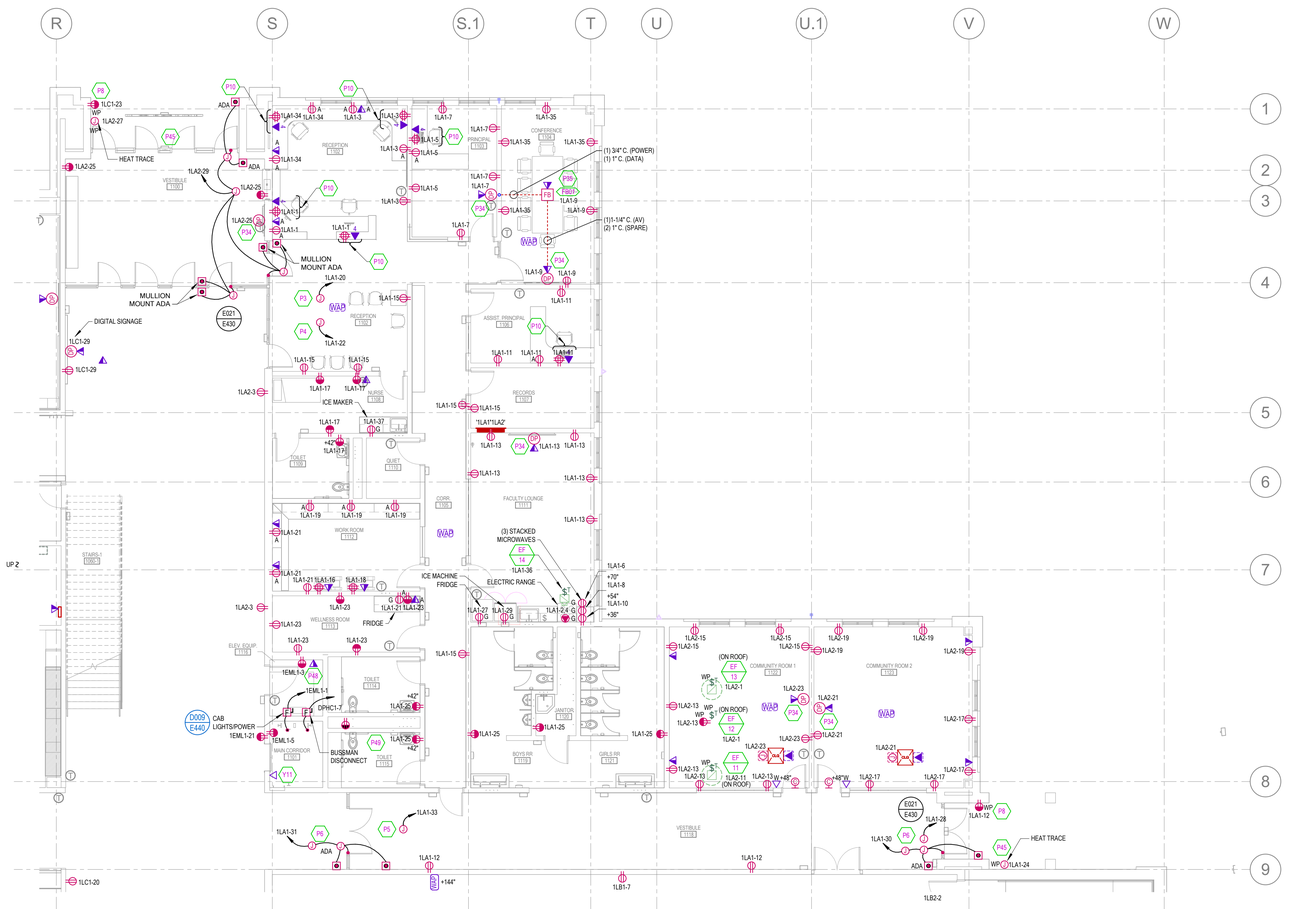
P35 PROVIDE FLOOR BOX/POKE THROUGH BOXES AS SHOWN. VERIFY LOCATION WITH ARCHITECT, FURNITURE, AND OWNER PRIOR ROUGH-IN.

P45 PROVIDE CONNECTION TO HEAT TRACE ON PRIMARY AND SECONDARY ROOF DRAIN PIPING. FIELD VERIFY DOWNSPOUT LOCATION PRIOR TO ROUGH-IN. COORDINATE WITH DIVISION 23 PRIOR TO INSTALL.

P48 RUN TWO DROPS TO NEAREST DATA ROOM THRU COPPER BACKBONE FOR ANALOG PHONE FOR ELEVATOR PHONE LINES. COORDINATE INSTALLATION REQUIREMENTS WITH ELEVATOR MANUFACTURER AND COORDINATE GPON REQUIREMENTS FOR COPPER PHONE LINES.

P49 EXTEND CONDUIT, CONDUCTORS, AND CONTROL WIRING FROM ELEVATOR DISCONNECT TO ELEVATOR MOTOR AND CONTROLLER.

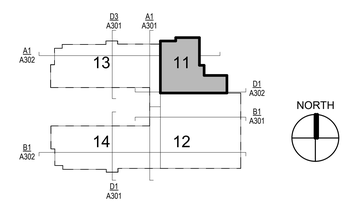
Y11 PRIOR TO STARTING ANY WORK, THE SECURITY CONTRACTOR SHALL COORDINATE A MEETING WITH THE OWNER, ARCHITECT, AND THE ELEVATOR CONTRACTOR AND DISCUSS THE CABLING FOR THE SURVEILLANCE CAMERA INSIDE THE ELEVATOR CAB AND IN THE ELEVATORS TRAVEL CABLE. THE SECURITY CONTRACTOR SHALL PROVIDE ALL OF THE NECESSARY EQUIPMENT TO PROVIDE A FULLY OPERATIONAL CAMERA IN THE ELEVATOR CAB.



LEVEL 01 - POWER FP - AREA 11

SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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REV DATE DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - POWER PLAN - AREA 11

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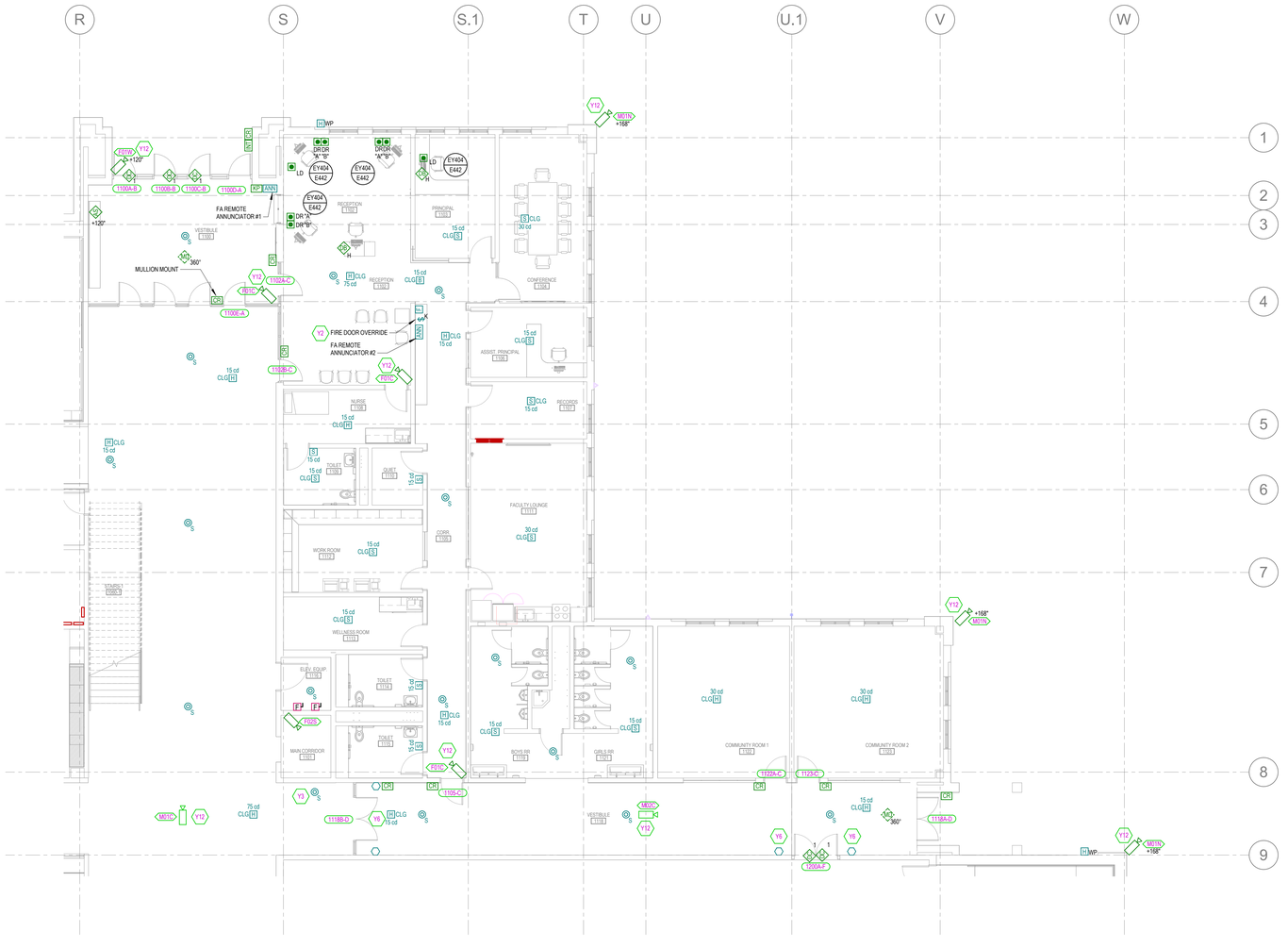


LEVEL 01 - SYSTEMS FP - AREA 11

SCALE = 1/8" = 1'-0"

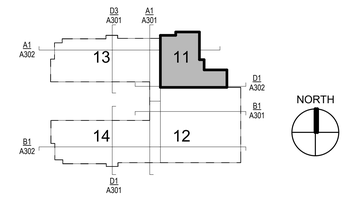
SYSTEMS GENERAL NOTES

1. FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY AND BASED UPON A PERFORMANCE SPECIFICATION. ALL NEW EQUIPMENT/DEVICE QUANTITIES, LOCATION, AND ALL NATIONAL & LOCAL CODE COMPLIANCE TO BE PROVIDED AND STAMPED BY A LICENSED FIRE ALARM ENGINEER AND INCLUDED IN THE FIRE ALARM CONTRACTORS BID. IN NO WAY ARE THE DEVICES SHOWN ON THESE DRAWINGS TO BE IMPLEMENTED AS FINAL DESIGN DOCUMENTS
2. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, PRECAST CONCRETE, MASONRY AND GYP WALLS.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT QUANTITY AND LOCATIONS OF ALL FIRE SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES WITH FIRE SPRINKLER DRAWINGS. CONNECT ALL TAMPER AND FLOW SWITCHES TO FIRE ALARM SYSTEM.
4. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND QUANTITY OF ALL DUCT TYPE SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. HARD WIRE TO RELAY STARTER.
5. REGARDLESS OF WHAT IS SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATIONS FOR MAGNETIC DOOR HOLDER AND OPERATION REQUIREMENTS. ALL VISUAL DEVICES SHALL BE SYNCHRONIZED WITHIN THE BUILDING REGARDLESS OF PROJECT SCOPE BOUNDARIES.
6. PROVIDE FIRE ALARM RELAY MODULES FOR ALL DOORS WITH ACCESS CONTROL DEVICES.
7. PROVIDE (2) DUCT TYPE SMOKE DETECTOR FOR EACH FAN COIL UNIT, AHU, SUPPLY FAN AND HEAT PUMP OF 2000 CFM OR GREATER.
8. PROVIDE 120V CIRCUIT FROM THE NEAREST EQUIPMENT BRANCH PANELBOARD FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER. REFER TO DIAGRAM D012.
9. COORDINATE EXACT LOCATIONS OF CREDENTIAL CARD READERS AND ADA CONTROLS STATIONS WITH ARCHITECTURAL & SYSTEM DRAWINGS PRIOR TO ROUGH-IN. PROVIDE ALL CREDENTIAL CARD READER LOCATIONS AS REQUIRED PER ENTIRE CONSTRUCTION DOCUMENTS.
10. COORDINATE CLOSELY WITH THE DIV.8 COMMERCIAL DOOR AND HARDWARE CONTRACTOR TO ASSURE PROPER PLACEMENT OF ELECTRIFIED DOOR HARDWARE EQUIPMENT.
11. PROVIDE RACEWAY, CONDUIT, AND WIRING FOR SECURITY DEVICES INDICATED. PROVIDE CONCEALED 3/4" C TYPICAL FOR LINES SHOWN TO SECURITY DEVICES. COORDINATE ALL JUNCTION BOX ROUGH-IN LOCATIONS WITH THE OWNER AND ACCESS SYSTEM CONTROL SYSTEM SUPPLIER PRIOR TO ANY ROUGH- IN.
12. DIV. 8 AND DIV 28 CONTRACTORS SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO OUTLINE POWER REQUIREMENTS AND CABLING FOR ALL ELECTRONIC ACCESS CONTROL EQUIPMENT AND EXACT DEVICE LOCATIONS.
13. PROVIDE ONE 4SQ J-BOX AND COVER ON PROTECTED SIDE OF DOORWAY IN ACCESSIBLE CEILING SPACE OR IN ANOTHER ACCESSIBLE LOCATION. PROVIDE HANDY BOX IN DOOR JAM, AND MOUNT BEFORE GROUTED. DRILL A 1/8" PILOT HOLE FOR DEVICE MOUNTING.
14. ALL CABLING TO DEVICES THAT ARE INSTALLED ON DOOR FRAMES OR MULLIONS SHALL BE ROUTED THROUGH THE INSIDE OF THE DOOR FRAME & MULLIONS. COORDINATE INSTALLATION WITH THE DOOR/WINDOW CONTRACTOR PRIOR TO ANY ROUGH-IN.
15. ELECTRONIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, CRASH BARS, ETC.) SHALL BE PROVIDED BY DIV. 8. REVIEW THE DOOR HARDWARE SCHEDULE TO VERIFY THE OPERATIONAL FUNCTIONALITY AND THE LOCK VOLTAGES WILL WORK FOR EACH DOOR.
16. POWER SUPPLIES FOR ELECTRIFIED LOCKS AND ACCESS CONTROL DEVICES SHALL BE PROVIDED BY THE DIV. 28 CONTRACTOR. COORDINATE WITH THE DIV.8 CONTRACTOR FOR EXACT POWER REQUIREMENTS.
17. ALL ACCESS CONTROL SYSTEM CABLING SHALL BE RAN BACK TO THE ASSOCIATED HEAD-END AND/OR SLAVE PANELS AND POWER SUPPLIES THAT ARE CENTRALLY LOCATED IN EF/ER/TR(MDF/IDF) ROOMS. ALTERNATE CONFIGURATIONS MAY BE ACCEPTABLE PROVIDED THAT THE CONTRACTOR SUBMITS A WRITTEN APPROVAL AND ALLOWS FOR ANY INCREASES FOR WIRING & EQUIPMENT AND SUBMITS PLAN DRAWINGS THAT SHOW THE NEW CONFIGURATION.
18. HEAD-END ACCESS CONTROL PANELS AND SUFFICIENT CONTROLLER BOARDS TO SERVICE THE NUMBER OF ACCESS DOORS SHOWN SHALL BE MOUNTED ON 4X8 FIRE RATED PLYWOOD BACKER.
19. THE ACCESS CONTROL SYSTEM SHALL INCLUDE RELAYS, EXTERNAL POWER SUPPLIES, AUXILIARY DEVICES OR INPUT/OUTPUT MODULES THAT ARE REQUIRED TO SUPPORT THE DOOR TYPES THAT ARE INDICATED FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL CARD READER AND DOOR CONTROL SYSTEM. THE REQUEST TO EXITS, DOOR CONTACTS, AND INDICATOR CIRCUITS SHALL BE SUPERVISED FOR OPEN CIRCUIT OR SHORT CIRCUIT FAULTS BETWEEN THE DEVICE CONTACTS AND THE ACCESS CONTROLLER.
20. ALL SECURITY CAMERAS SHOWN SHALL HAVE ONE CAT6A CABLE INSTALLED BY THE LOW VOLTAGE CONTRACTOR, WITH 10'-0" SERVICE LOOPS AT EACH CAMERA LOCATION AND BACK WHERE IT WILL BE TERMINATED IN THE EF/ER/TR(MDF/IDF) ROOMS, SO EQUIPMENT CAN BE MOVE OR RELOCATED IF REQUIRED.
21. THE SECURITY CONTRACTORS SHALL FOLLOW ALL OF THE MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS, & INSTRUCTIONS, AND THE OWNER'S REQUIREMENTS AND INSTRUCTIONS.
22. THE SECURITY CONTRACTORS SHALL INSTALL ALL EQUIPMENT USING INDUSTRIES BEST STANDARDS & PRACTICES.
23. ALL EXTERIOR DOORS, GARAGE DOORS, ROOF HATCHS OR ACCESS DOORS, EF/ER/TR (MDF/IDF) ROOM DOORS, RISER ROOMS, AND ANY DOOR EQUIPPED WITH A CREDENTIAL CARD READER, MUST HAVE A SEPARATE DOOR CONTACT FOR THE ACCESS CONTROL SYSTEM AND THE INTRUSION DETECTION SYSTEM.
24. SECURITY INTEGRATOR SHALL COORDINATE ALL DOOR HARDWARE WITH THE DIV.8 CONTRACTOR FOR LOCK TYPES, POWER SUPPLIES, AND ANY MISCELLANEOUS EQUIPMENT NECESSARY. CAREFULLY REVIEW DOOR HARDWARE SUBMITTAL AND SUMMARIZE DISCREPANCIES TO TEAM ASAP.
25. EQUIPMENT COUNTS ARE PROVIDED FOR INFORMATION ONLY AT A CONVENIENCE TO THE CONTRACTOR. IT STILL REMAINS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DRAWING QUANTITIES. IF A DISCREPANCY ARISES BETWEEN THE SCHEDULE COUNTS AND THE DRAWING COUNTS, THE HIGHEST QUANTITY SHALL BE INCLUDED IN THE BID. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE ALL SPECIFIED AND NON-SPECIFIED COMPONENTS NEEDED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.
26. PROVIDE FIRE ALARM INTERFACE WITH THE ACCESS CONTROL SYSTEM SO TO UNLOCK ALL INDICATED LOCKS UPON ANY FIRE ALARM INITIATION.
27. REFER TO THE SPECIFICATIONS FOR THE INTEGRATION & TIE-IN REQUIREMENTS BETWEEN SYSTEMS (VIDEO SURVEILLANCE SYSTEMS, ACCESS CONTROL SYSTEMS, INTRUSION DETECTION SYSTEMS, AND FIRE ALARM SYSTEMS, ETC.)
28. SECURITY INTEGRATOR SHALL CAREFULLY REVIEW THE REFLECTED CEILING PLANS, ARCHITECTURAL ELEVATIONS, AND MILLWORK DRAWINGS FOR ALL DEVICE & COMPONENT INSTALLATION PRIOR TO INSTALLING ANY EQUIPMENT.
29. ALL CAMERAS AND CAMERA MOUNTING HARDWARE ARE GOING TO BE OWNER FURNISHED, AND CONTRACTOR INSTALLED. CONTRACTOR SHALL PAINT MOUNTING HARDWARE AND CAMERAS TO MATCH THE BUILDING MOUNTING SURFACE COLOR. COORDINATE COLORS WITH ARCHITECT PRIOR TO PREP AND PAINTING.
30. CONTRACTOR SHALL VERIFY ALL CAMERA LOCATIONS, HEIGHTS, ORIENTATIONS, AND VIEWS WITH THE SCHOOL DISTRICT PRIOR TO STARTING ANY WORK TO ENSURE IDEAL VIEWS FOR EACH CAMERA.

SHEET KEYNOTES

Y2	PROVIDE KEY OVERRIDE SWITCH THAT WILL RELEASE ALL ELECTROMAGNETIC DOOR HOLDERS/RELEASES THROUGHOUT THE BUILDING. VERIFY FINAL REQUIREMENTS WITH OWNER PRIOR TO PROGRAMMING.
Y3	SEE SPECIFICATIONS 26 0510 (ELEVATOR ELECTRICAL REQUIREMENTS) FOR FIRE ALARM SYSTEM AND ELEVATOR INTEGRATION E.G. LOBBIES, HOISTWAYS, ELEVATOR ROOMS, ETC. PROVIDE REQUIRED DEVICES, DISCONNECTS, AND SYSTEM CONNECTIONS AS REQUIRED.
Y6	DOOR HOLDERS LOCATIONS. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLIES(IF REQUIRED), HOLD OPENS, ACCESS CONTROL, FIRE ALARM CONTROL AND 24VDC POWER CIRCUIT. COORDINATE DOOR HOLDERS LOCATION WITH DOOR HARDWARE SCHEDULES. FIRE ALARM CONTROL MODULE SHALL RELEASE DOORS UPON ACTIVATION OF AN ALARM OR LOCKDOWN.
Y12	SURVEILLANCE CAMERA LOCATIONS THAT ARE SHOWN ON PLANS ARE FOR ROUGH-IN ONLY (CONDUIT & CAT6 CABLING). OGDEN SCHOOL DISTRICT WILL BE PROVIDING ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT, SECURITY CONTRACTOR TO INSTALL ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT, AND OGDEN SCHOOL DISTRICT WILL BE PROGRAMING THE SURVEILLANCE CAMERAS AND EQUIPMENT.

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - SYSTEMS PLAN - AREA 11

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LEVEL 01 - LIGHTING RCP - AREA 12

SCALE = 1/8" = 1'-0"

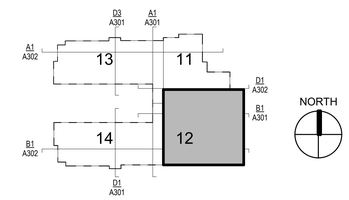
LIGHTING SHEET NOTES

1. DEVICE HEIGHTS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL ROUGH-IN ELEVATION HEIGHTS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUGH-IN DEVICES 6" ABOVE DESKTOPS,COUNTERS, ETC.
2. REFFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. FOR AREAS WITHOUT CEILINGS, FIXTURE LOCATIONS ARE DIAGRAMMATIC. THE INTENT IS TO ALIGN, CENTER, OR SPACE FIXTURES BETWEEN ARCHITECTURAL AND STRUCTURAL ELEMENTS.. CONTRACTOR TO PAINT EXPOSED RACEWAY TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY EXACT FIXTURE LENGTHS FOR CONTINUOUS ILLUMINATION FOR COVES AND LINEAR RUNS. PROVIDE CONTINUOUS ILLUMINATION WITH NO MORE THAN A 1" GAP BETWEEN THE END OF THE EDGE OF THE WALL / CEILING AND THE FIXTURE
4. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR PLACEMENT OF FIXTURES WITHIN MECHANICAL ROOMS.
5. ALL ROOM CONTROLLERS AND/OR POWER PACKS SHALL BE INSTALLED IN THE CEILING SPACE DIRECTLY ABOVE THE ENTRY DOOR TO THE SPACE IT IS CONTROLLING.
6. SEE CORRESPONDING LIGHTING DIAGRAMS FOR GENERAL INSTALLATION.
7. REQUIREMENTS, CONNECTIONS, AND CABLE TYPES.
8. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO ALL EMERGENCY POWER CONTROL DEVICES FOR PROPER POWER SENSING.
9. PROVIDE UNSWITCHED HOT AHEAD OF RELAY, OCCUPENCY SENSOR, OR SWITCH TO ALL EXIT SIGNS.
10. IF SHOWN, SUBSCRIPT NEAR LIGHT FIXTURES INDICATES CONTROL INTENT. PROVIDE LIGHTING CONTROLLERS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS NEEDED
11. PROVIDE 0-10V DIMMING FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE WALLSTATION CONTROL SEQUENCE AND OR BY TYPE OF CONTROL INTERFACE SHOWN.
12. ALL 277V LIGHTING CIRCUITS TERMINATING AT LIGHTING CONTROL PANELS SHALL HAVE A MINIMUM LENGTH OF 20 FEET BETWEEN LIGHTING CONTROL PANEL AND BRANCH LIGHTING PANEL.
13. CAREFULLY COORDINATE FIXTURE PLACEMENT WITHIN BAFFLED CEILINGS. PENDANT MOUNTING FIXTURE SHALL BE MOUNTED AT THE SAME ELEVATION AS BAFFLES. COORDINATE WITH ARCHITECTURAL RCP AND DETAILS PRIOR TO ROUGH-IN.
14. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
15. ALL UNDERCABINET LIGHTS MUST BE COORDINATED WITH MILLWORK FOR EXACT LENGTHS. COORDINATE WITH MILLWORK SHOP DRAWINGS.
16. PROVIDE 0-10V DIMMER CONDUCTORS FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE RELAY PANEL SCHEDULE, WALL STATION CONTROL SEQUENCE., OR REQUIRED BY IECC 2021.
17. SUBSCRIPT ADJACENT TO LIGHT FIXTURE INDICATES INTENDED CONTROL GROUPING. PROVIDE LIGHTING CONTROLS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS. PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS REQUIRED.
18. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURE'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

SHEET KEYNOTES

L1	LOCATE WALLSTATION WITHIN SWITCHING CABINET. SEE DIAGRAM P004/E220 FOR MORE INFORMATION.
L13	FIELD PAINT ALL FIXTURES BLACK ABOVE PLATFORM TO MATCH BLACK GRID CEILING.
L16	FREEZER/COOLER LUMINAIRES PROVIDED BY KITCHEN CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
L18	CIRCUIT EXTERIOR DUPLEX OUTLET THROUGH AREA RELAY PANEL. EXTERIOR OUTLETS CONTROLLED VIA LOW VOLTAGE CONTROL SWITCH 'RCO' AND PROGRAMMED PER OWNER REQUIREMENTS.
L19	PROVIDE EXTENDED RANGE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN THROUGHOUT CORRIDORS. PROVIDE 0-10V DIMMING ON ALL CORRIDOR LIGHTING RELAYS. OCCUPANCY SENSOR SHALL DIM CORRIDOR RELAY TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. LOCATE OCCUPANCY SENSOR SENSOR(S) PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.
L23	COORDINATE MOUNTING OF FIXTURES TO AVOID OBSTRUCTION OF ILLUMINATION KITCHEN EQUIPMENT, ETC. MOVE FIXTURES WITHIN THE GRID AS NECESSARY.

KEY PLAN - MAIN LEVEL



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130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - LIGHTING PLAN - AREA 12

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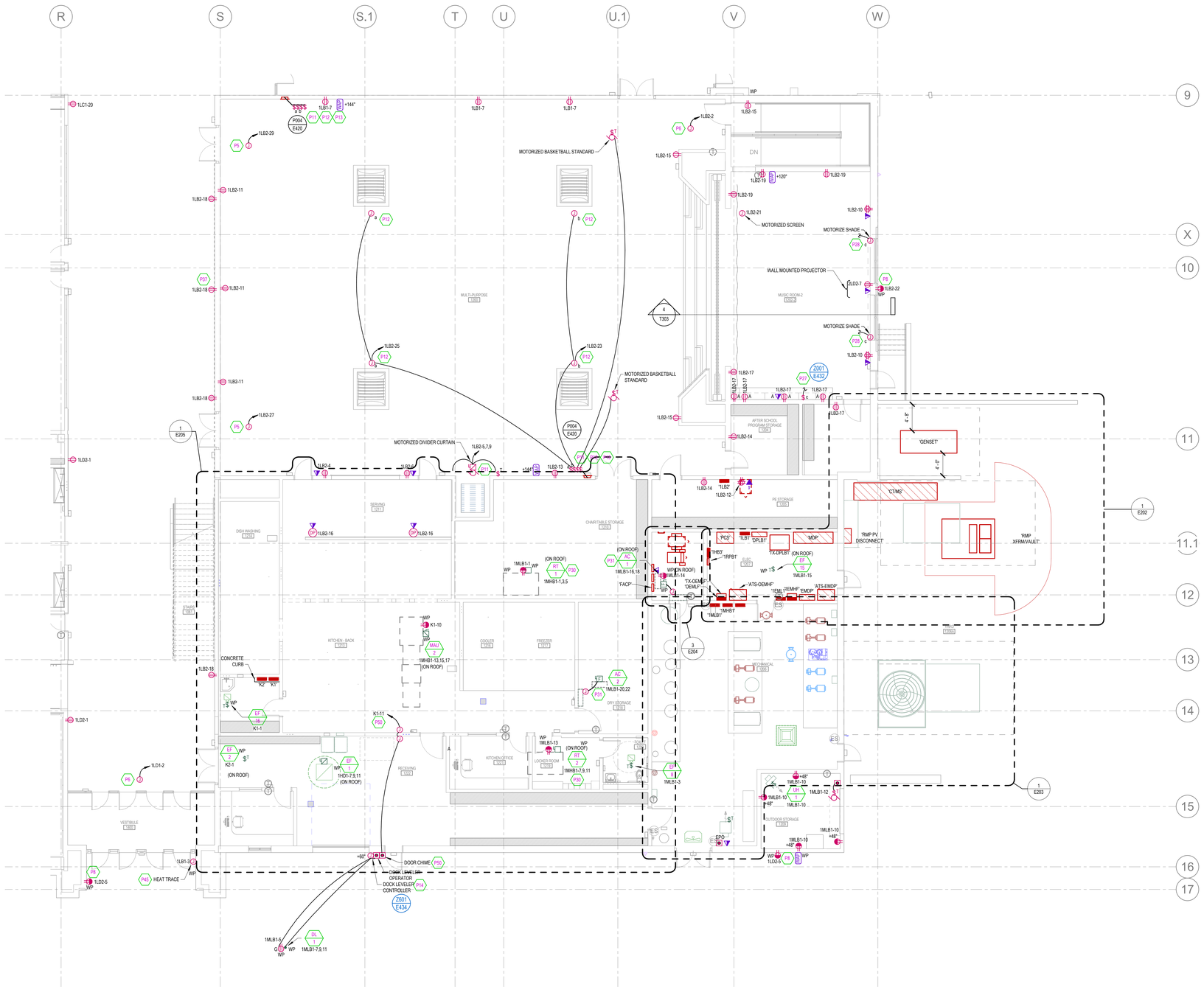
POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.

SHEET KEYNOTES

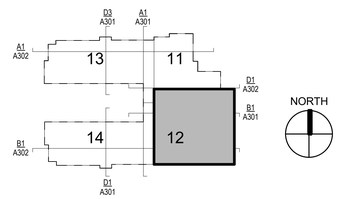
P5	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE SEPARATION AREAS AND DOOR HOLD OPENS. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLY, HOLD OPENS, KEY SWITCHES, ACCESS CONTROL, AND FIRE ALARM SYSTEM. COORDINATE WITH DOOR HARDWARE SUPPLIER AND FIRE ALARM CONTRACTOR FOR ADDITIONAL INFORMATION.
P6	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR DOOR HARDWARE EQUIPMENT E.G. ADA, POWER SUPPLIES, ETC. WIRE COMPLETELY TO ALL POWER AND ACCESS CONTROL RELATED DOOR HARDWARE EQUIPMENT. COORDINATE EXACT LOCATION OF JUNCTION BOXES WITH DOOR HARDWARE CONTRACTOR PRIOR TO ROUGH-IN.
P8	OUTLET CONTROLLED THROUGH RELAY PANEL/CORRIDOR LIGHTING RELAY CONTROL SYSTEM VIA LOW VOLTAGE WALLSTATION 'EXT OUT - 'EXT. OUT.' WALLSTATIONS LOCATED WITHIN RECEPTION 1102, SOUTH EAST GYMNASIUM SWITCHING CABINET, AND CUSTODIAL OFFICE 1223.
P11	WIRE DIVIDER CURTAIN MOTOR AS REQUIRED. LOCATE AND TERMINATE COMPLETELY THE DOOR CONTROLLER E.G. SWITCHES, TRANSFORMERS, TERMINAL BLOCK, # OF WIRES, ETC. PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE A PRESSURIZED MOMENTARY SWITCH IN LIEU OF KEYED SWITCH (HUBBELL HBL1556I OR EQUIVALENT). PROVIDE AND LOCATE A SWITCH IN EACH SWITCHING CABINET #1 AND #2. SEE DIAGRAM P004/E420 FOR MORE INFORMATION.
P12	PROVIDE JUNCTION BOX ADJACENT TO SKYLIGHT FOR MOTORIZED SHADE MOTOR(S). FIELD VERIFY FINAL SKYLIGHT LOCATION PRIOR TO ROUGH-IN. COORDINATE LOCATION OF JUNCTION BOX WITH SHOP DRAWINGS AND ARCHITECT SO THAT ALL ELECTRICAL CONNECTIONS ARE CONCEALED BY SHADE HEADER. PROVIDE CONDUIT AND ALL WIRE, TERMINATIONS ETC. TO SHADE CONTROLLER(S). GROUP MOTORS TOGETHER AS INDICATED e.g. 'a', 'b', 'c', 'd'. LOCATE MOTORIZED SHADE CONTROLLER SWITCHES WITHIN EACH SWITCHING CABINET.
P13	WIRE BASKETBALL STANDARD MOTOR AS REQUIRED. FIELD VERIFY FINAL STANDARD LOCATION PRIOR TO ROUGH-IN. LOCATE AND TERMINATE COMPLETELY THE CONTROLLER E.G. SWITCHES, TRANSFORMERS, TERMINAL BLOCK, # OF WIRES, ETC. PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE A PRESSURIZED MOMENTARY SWITCH IN LIEU OF KEYED SWITCH (HUBBELL HBL 1556I OR EQUIVALENT). PROVIDE AND LOCATE MOTORIZED BACKBOARD SWITCHES (NUMBER AS REQ.) IN SWITCHING CABINET. SEE DIAGRAM P004/E420 FOR MORE INFORMATION.
P14	PROVIDE CONNECTIONS TO MOTORIZED DOCK LEVELER. FIELD COORDINATE CONTROLLER MOUNTING LOCATION WITH OWNER AND ARCHITECT AND MOUNT CONTROLLER A +60". PROVIDE (2) 3/4" CONDUITS TO DOCK PIT FOR DUPLEX AND LEVELER SENSOR FROM CONTROL BOX AND (1) 3/4" C. TO BUTTON OPERATOR. REFER TO MANUFACTURER'S SHOP DRAWINGS AND DIAGRAM Z601/E434 FOR ADDITIONAL REQUIREMENTS.
P27	WINDOW SHADE SWITCH(S) (WALL) AND CONTROLLER(S) LOCATION (ABOVE CEILING). PROVIDE POWER TO CONTROLLERS AND ALL CONDUIT, WIRE, ETC. REQUIRED FROM CONTROLLERS TO SHADE MOTORS. SHADING COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENTS WITH SHADE SHOP DRAWINGS AND SHADE INSTALLER PRIOR TO ROUGH-IN.
P28	PROVIDE JUNCTION BOX ABOVE WINDOW FOR SHADE MOTOR(S). COORDINATE LOCATION OF JUNCTION BOX WITH SHOP DRAWINGS AND ARCHITECT SO THAT ALL ELECTRICAL CONNECTIONS ARE CONCEALED BY SHADE HEADER. PROVIDE CONDUIT AND ALL WIRE, TERMINATIONS ETC. TO SHADE CONTROLLER(S). GROUP MOTORS TOGETHER AS INDICATED e.g. 'a', 'b', 'c', 'd'.
P30	FACTORY PROVIDED AND MOUNTED ELECTRICAL DISCONNECT AND ELECTRICAL CONVENIENCE RECEPTACLE. PROVIDE REQUIRED POWER CONNECTION TO DISCONNECT AND RECEPTACLE AS REQUIRED.
P31	SPLIT AC SYSTEM. PROVIDE 3/4" CONDUIT AND REQUIRED UNIT WIRING BETWEEN OUTDOOR AND INDOOR UNIT. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL CONDUIT AND WIRING. COORDINATE LOCATION TERMINATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
P37	MOUNT DEVICE IN DISPLAY CASE. COORDINATE WITH DISPLAY CABINET SHOP DRAWINGS, MILLWORK CONTRACTOR, AND ARCHITECT FOR EXACT LOCATION AND REQUIREMENTS PRIOR TO ROUGH-IN.
P45	PROVIDE CONNECTION TO HEAT TRACE ON PRIMARY AND SECONDARY ROOF DRAIN PIPING. FIELD VERIFY DOWNSPOUT LOCATION PRIOR TO ROUGH-IN. COORDINATE WITH DIVISION 23 PRIOR TO INSTALL.
P50	PROVIDE WIRED DOORBELL CHIME - NEWHOUSE HARDWARE CHM3D+XFMR+BUTTON OR EQUAL. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.



LEVEL 01 - POWER FP - AREA 12

SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - POWER PLAN - AREA 12

E112.2

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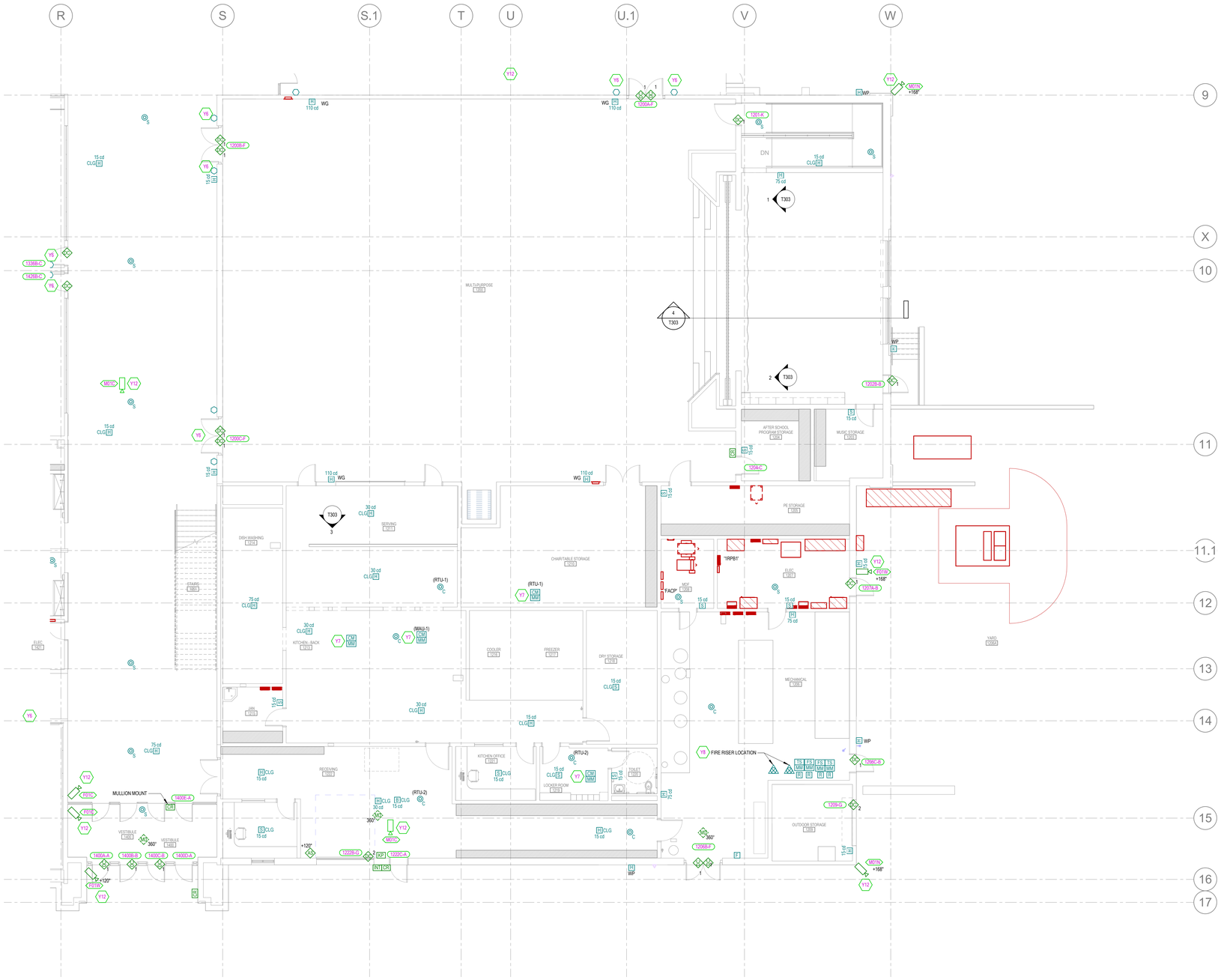


LEVEL 01 - SYSTEMS FP - AREA 12
SCALE = 1/8" = 1'-0"

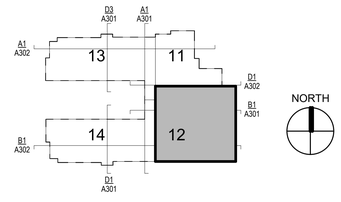
SYSTEMS GENERAL NOTES

1. FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY AND BASED UPON A PERFORMANCE SPECIFICATION. ALL NEW EQUIPMENT/DEVICE QUANTITIES, LOCATION, AND ALL NATIONAL & LOCAL CODE COMPLIANCE TO BE PROVIDED AND STAMPED BY A LICENSED FIRE ALARM ENGINEER AND INCLUDED IN THE FIRE ALARM CONTRACTORS BID. IN NO WAY ARE THE DEVICES SHOWN ON THESE DRAWINGS TO BE IMPLEMENTED AS FINAL DESIGN DOCUMENTS
2. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, PRECAST CONCRETE, MASONRY AND GYP WALLS.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT QUANTITY AND LOCATIONS OF ALL FIRE SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES WITH FIRE SPRINKLER DRAWINGS. CONNECT ALL TAMPER AND FLOW SWITCHES TO FIRE ALARM SYSTEM.
4. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND QUANTITY OF ALL DUCT TYPE SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. HARD WIRE TO RELAY STARTER.
5. REGARDLESS OF WHAT IS SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATIONS FOR MAGNETIC DOOR HOLDER AND OPERATION REQUIREMENTS. ALL VISUAL DEVICES SHALL BE SYNCHRONIZED WITHIN THE BUILDING REGARDLESS OF PROJECT SCOPE BOUNDARIES.
6. PROVIDE FIRE ALARM RELAY MODULES FOR ALL DOORS WITH ACCESS CONTROL DEVICES.
7. PROVIDE (2) DUCT TYPE SMOKE DETECTOR FOR EACH FAN COIL UNIT, AHU, SUPPLY FAN AND HEAT PUMP OF 2000 CFM OR GREATER.
8. PROVIDE 120V CIRCUIT FROM THE NEAREST EQUIPMENT BRANCH PANELBOARD FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER. REFER TO DIAGRAM D012.
9. COORDINATE EXACT LOCATIONS OF CREDENTIAL CARD READERS AND ADA CONTROLS STATIONS WITH ARCHITECTURAL & SYSTEM DRAWINGS PRIOR TO ROUGH-IN. PROVIDE ALL CREDENTIAL CARD READER LOCATIONS AS REQUIRED PER ENTIRE CONSTRUCTION DOCUMENTS.
10. COORDINATE CLOSELY WITH THE DIV.8 COMMERCIAL DOOR AND HARDWARE CONTRACTOR TO ASSURE PROPER PLACEMENT OF ELECTRIFIED DOOR HARDWARE EQUIPMENT.
11. PROVIDE RACEWAY, CONDUIT, AND WIRING FOR SECURITY DEVICES INDICATED. PROVIDE CONCEALED 3/4" C TYPICAL FOR LINES SHOWN TO SECURITY DEVICES. COORDINATE ALL JUNCTION BOX ROUGH-IN LOCATIONS WITH THE OWNER AND ACCESS SYSTEM CONTROL SYSTEM SUPPLIER PRIOR TO ANY ROUGH- IN.
12. DIV. 8 AND DIV 28 CONTRACTORS SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO OUTLINE POWER REQUIREMENTS AND CABLING FOR ALL ELECTRONIC ACCESS CONTROL EQUIPMENT AND EXACT DEVICE LOCATIONS.
13. PROVIDE ONE 4SQ J-BOX AND COVER ON PROTECTED SIDE OF DOORWAY IN ACCESSIBLE CEILING SPACE OR IN ANOTHER ACCESSIBLE LOCATION. PROVIDE HANDY BOX IN DOOR JAM, AND MOUNT BEFORE GROUTED. DRILL A 1/8" PILOT HOLE FOR DEVICE MOUNTING.
14. ALL CABLING TO DEVICES THAT ARE INSTALLED ON DOOR FRAMES OR MULLIONS SHALL BE ROUTED THROUGH THE INSIDE OF THE DOOR FRAME & MULLIONS. COORDINATE INSTALLATION WITH THE DOOR/WINDOW CONTRACTOR PRIOR TO ANY ROUGH-IN.
15. ELECTRONIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, CRASH BARS, ETC.) SHALL BE PROVIDED BY DIV. 8. REVIEW THE DOOR HARDWARE SCHEDULE TO VERIFY THE OPERATIONAL FUNCTIONALITY AND THE LOCK VOLTAGES WILL WORK FOR EACH DOOR.
16. POWER SUPPLIES FOR ELECTRIFIED LOCKS AND ACCESS CONTROL DEVICES SHALL BE PROVIDED BY THE DIV. 28 CONTRACTOR. COORDINATE WITH THE DIV.8 CONTRACTOR FOR EXACT POWER REQUIREMENTS.
17. ALL ACCESS CONTROL SYSTEM CABLING SHALL BE RAN BACK TO THE ASSOCIATED HEAD-END AND/OR SLAVE PANELS AND POWER SUPPLIES THAT ARE CENTRALLY LOCATED IN EF/ER/TR(MDF/IDF) ROOMS. ALTERNATE CONFIGURATIONS MAY BE ACCEPTABLE PROVIDED THAT THE CONTRACTOR SUBMITS A WRITTEN APPROVAL AND ALLOWS FOR ANY INCREASES FOR WIRING & EQUIPMENT AND SUBMITS PLAN DRAWINGS THAT SHOW THE NEW CONFIGURATION.
18. HEAD-END ACCESS CONTROL PANELS AND SUFFICIENT CONTROLLER BOARDS TO SERVICE THE NUMBER OF ACCESS DOORS SHOWN SHALL BE MOUNTED ON 4X8 FIRE RATED PLYWOOD BACKER.
19. THE ACCESS CONTROL SYSTEM SHALL INCLUDE RELAYS, EXTERNAL POWER SUPPLIES, AUXILIARY DEVICES OR INPUT/OUTPUT MODULES THAT ARE REQUIRED TO SUPPORT THE DOOR TYPES THAT ARE INDICATED FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL CARD READER AND DOOR CONTROL SYSTEM. THE REQUEST TO EXITS, DOOR CONTACTS, AND INDICATOR CIRCUITS SHALL BE SUPERVISED FOR OPEN CIRCUIT OR SHORT CIRCUIT FAULTS BETWEEN THE DEVICE CONTACTS AND THE ACCESS CONTROLLER.
20. ALL SECURITY CAMERAS SHOWN SHALL HAVE ONE CAT6A CABLE INSTALLED BY THE LOW VOLTAGE CONTRACTOR, WITH 10'-0" SERVICE LOOPS AT EACH CAMERA LOCATION AND BACK WHERE IT WILL BE TERMINATED IN THE EF/ER/TR(MDF/IDF) ROOMS, SO EQUIPMENT CAN BE MOVE OR RELOCATED IF REQUIRED.
21. THE SECURITY CONTRACTORS SHALL FOLLOW ALL OF THE MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS, & INSTRUCTIONS, AND THE OWNER'S REQUIREMENTS AND INSTRUCTIONS.
22. THE SECURITY CONTRACTORS SHALL INSTALL ALL EQUIPMENT USING INDUSTRIES BEST STANDARDS & PRACTICES.
23. ALL EXTERIOR DOORS, GARAGE DOORS, ROOF HATCHS OR ACCESS DOORS, EF/ER/TR (MDF/IDF) ROOM DOORS, RISER ROOMS, AND ANY DOOR EQUIPPED WITH A CREDENTIAL CARD READER, MUST HAVE A SEPARATE DOOR CONTACT FOR THE ACCESS CONTROL SYSTEM AND THE INTRUSION DETECTION SYSTEM.
24. SECURITY INTEGRATOR SHALL COORDINATE ALL DOOR HARDWARE WITH THE DIV.8 CONTRACTOR FOR LOCK TYPES, POWER SUPPLIES, AND ANY MISCELLANEOUS EQUIPMENT NECESSARY. CAREFULLY REVIEW DOOR HARDWARE SUBMITTAL AND SUMMARIZE DISCREPANCIES TO TEAM ASAP.
25. EQUIPMENT COUNTS ARE PROVIDED FOR INFORMATION ONLY AT A CONVENIENCE TO THE CONTRACTOR. IT STILL REMAINS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DRAWING QUANTITIES. IF A DISCREPANCY ARISES BETWEEN THE SCHEDULE COUNTS AND THE DRAWING COUNTS, THE HIGHEST QUANTITY SHALL BE INCLUDED IN THE BID. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE ALL SPECIFIED AND NON-SPECIFIED COMPONENTS NEEDED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.
26. PROVIDE FIRE ALARM INTERFACE WITH THE ACCESS CONTROL SYSTEM SO TO UNLOCK ALL INDICATED LOCKS UPON ANY FIRE ALARM INITIATION.
27. REFER TO THE SPECIFICATIONS FOR THE INTEGRATION & TIE-IN REQUIREMENTS BETWEEN SYSTEMS (VIDEO SURVEILLANCE SYSTEMS, ACCESS CONTROL SYSTEMS, INTRUSION DETECTION SYSTEMS, AND FIRE ALARM SYSTEMS, ETC.)
28. SECURITY INTEGRATOR SHALL CAREFULLY REVIEW THE REFLECTED CEILING PLANS, ARCHITECTURAL ELEVATIONS, AND MILLWORK DRAWINGS FOR ALL DEVICE & COMPONENT INSTALLATION PRIOR TO INSTALLING ANY EQUIPMENT.
29. ALL CAMERAS AND CAMERA MOUNTING HARDWARE ARE GOING TO BE OWNER FURNISHED, AND CONTRACTOR INSTALLED. CONTRACTOR SHALL PAINT MOUNTING HARDWARE AND CAMERAS TO MATCH THE BUILDING MOUNTING SURFACE COLOR. COORDINATE COLORS WITH ARCHITECT PRIOR TO PREP AND PAINTING.
30. CONTRACTOR SHALL VERIFY ALL CAMERA LOCATIONS, HEIGHTS, ORIENTATIONS, AND VIEWS WITH THE SCHOOL DISTRICT PRIOR TO STARTING ANY WORK TO ENSURE IDEAL VIEWS FOR EACH CAMERA.

SHEET KEYNOTES

Y6	DOOR HOLDERS LOCATIONS. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLIES(IF REQUIRED), HOLD OPENS, ACCESS CONTROL, FIRE ALARM CONTROL AND 24VDC POWER CIRCUIT. COORDINATE DOOR HOLDERS LOCATION WITH DOOR HARDWARE SCHEDULES. FIRE ALARM CONTROL MODULE SHALL RELEASE DOORS UPON ACTIVATION OF AN ALARM OR LOCKDOWN.
Y7	PROVIDE ALL FIRE ALARM AND AUX CONNECTIONS/TERMINATIONS AT UDS AND HOOD AS REQUIRED BY MANUFACTURER.
Y8	FIRE RISER LOCATION. PROVIDE REQUIRED QUANTITY OF MONITOR MODULES, CONTROL MODULES, TAMPER SWITCHES, AND FLOW SWITCHES FOR A COMPLETE AND WORKING SYSTEM. REVIEW FIRE PROTECTION DRAWINGS PRIOR TO BIDDING.
Y12	SURVEILLANCE CAMERA LOCATIONS THAT ARE SHOWN ON PLANS ARE FOR ROUGH-IN ONLY (CONDUIT & CAT6 CABLING). OGDEN SCHOOL DISTRICT WILL BE PROVIDING ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT. SECURITY CONTRACTOR TO INSTALL ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT, AND OGDEN SCHOOL DISTRICT WILL BE PROGRAMING THE SURVEILLANCE CAMERAS AND EQUIPMENT.

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - SYSTEMS PLAN - AREA 12

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LIGHTING SHEET NOTES

1. DEVICE HEIGHTS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL ROUGH-IN ELEVATION HEIGHTS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUGH-IN DEVICES 6" ABOVE DESKTOPS,COUNTERS, ETC.
2. REFFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. FOR AREAS WITHOUT CEILINGS, FIXTURE LOCATIONS ARE DIAGRAMMATIC. THE INTENT IS TO ALIGN, CENTER, OR SPACE FIXTURES BETWEEN ARCHITECTURAL AND STRUCTURAL ELEMENTS.. CONTRACTOR TO PAINT EXPOSED RACEWAY TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY EXACT FIXTURE LENGTHS FOR CONTINUOUS ILLUMINATION FOR COVES AND LINEAR RUNS. PROVIDE CONTINUOUS ILLUMINATION WITH NO MORE THAN A 1" GAP BETWEEN THE END OF THE EDGE OF THE WALL / CEILING AND THE FIXTURE
4. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR PLACEMENT OF FIXTURES WITHIN MECHANICAL ROOMS.
5. ALL ROOM CONTROLLERS AND/OR POWER PACKS SHALL BE INSTALLED IN THE CEILING SPACE DIRECTLY ABOVE THE ENTRY DOOR TO THE SPACE IT IS CONTROLLING.
6. SEE CORRESPONDING LIGHTING DIAGRAMS FOR GENERAL INSTALLATION.
7. REQUIREMENTS, CONNECTIONS, AND CABLE TYPES.
8. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO ALL EMERGENCY POWER CONTROL DEVICES FOR PROPER POWER SENSING.
9. PROVIDE UNSWITCHED HOT AHEAD OF RELAY, OCCUPENCY SENSOR, OR SWITCH TO ALL EXIT SIGNS.
10. IF SHOWN, SUBSCRIPT NEAR LIGHT FIXTURES INDICATES CONTROL INTENT. PROVIDE LIGHTING CONTROLLERS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS NEEDED
11. PROVIDE 0-10V DIMMING FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE WALLSTATION CONTROL SEQUENCE AND OR BY TYPE OF CONTROL INTERFACE SHOWN.
12. ALL 277V LIGHTING CIRCUITS TERMINATING AT LIGHTING CONTROL PANELS SHALL HAVE A MINIMUM LENGTH OF 20 FEET BETWEEN LIGHTING CONTROL PANEL AND BRANCH LIGHTING PANEL.
13. CAREFULLY COORDINATE FIXTURE PLACEMENT WITHIN BAFFLED CEILINGS. PENDANT MOUNTING FIXTURE SHALL BE MOUNTED AT THE SAME ELEVATION AS BAFFLES. COORDINATE WITH ARCHITECTURAL RCP AND DETAILS PRIOR TO ROUGH-IN.
14. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
15. ALL UNDERCABINET LIGHTS MUST BE COORDINATED WITH MILLWORK FOR EXACT LENGTHS. COORDINATE WITH MILLWORK SHOP DRAWINGS.
16. PROVIDE 0-10V DIMMER CONDUCTORS FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE RELAY PANEL SCHEDULE, WALL STATION CONTROL SEQUENCE., OR REQUIRED BY IECC 2021.
17. SUBSCRIPT ADJACENT TO LIGHT FIXTURE INDICATES INTENDED CONTROL GROUPING. PROVIDE LIGHTING CONTROLS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS. PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS REQUIRED.
18. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURE'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

SHEET KEYNOTES

L18 CIRCUIT EXTERIOR DUPLEX OUTLET THROUGH AREA RELAY PANEL. EXTERIOR OUTLETS CONTROLLED VIA LOW VOLTAGE CONTROL SWITCH 'RCO' AND PROGRAMMED PER OWNER REQUIREMENTS.

L19 PROVIDE EXTENDED RANGE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN THROUGHOUT CORRIDORS. PROVIDE 0-10V DIMMING ON ALL CORRIDOR LIGHTING RELAYS. OCCUPANCY SENSOR SHALL DIM CORRIDOR RELAY TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. LOCATE OCCUPANCY SENSOR SENSOR(S) PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.

LEVEL 01 - LIGHTING RCP - AREA 13

SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL

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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - LIGHTING PLAN - AREA 13

E113.1

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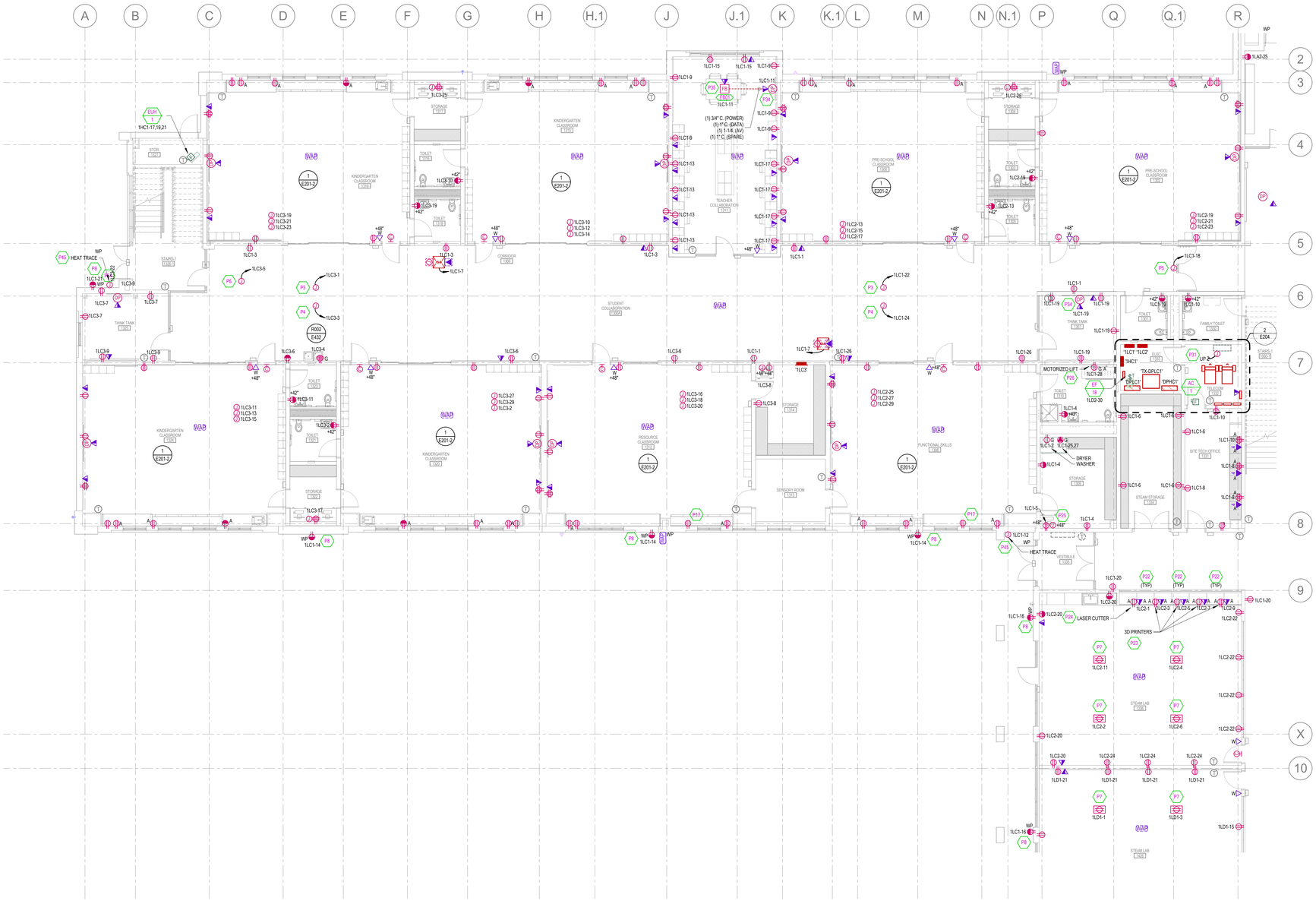
POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.

SHEET KEYNOTES

P3	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR VAV CONTROL TRANSFORMER. CONTROLS CONTRACTOR TO MAKE CONNECTION TO CONTROL TRANSFORMER AND VAV BOXES. COORDINATE EXACT LOCATION OF JUNCTION BOXES WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
P4	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE/SMOKE DAMPERS. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
P5	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE SEPARATION AREAS AND DOOR HOLD OPENS. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLY, HOLD OPENS, KEY SWITCHES, ACCESS CONTROL, AND FIRE ALARM SYSTEM. COORDINATE WITH DOOR HARDWARE SUPPLIER AND FIRE ALARM CONTRACTOR FOR ADDITIONAL INFORMATION.
P6	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR DOOR HARDWARE EQUIPMENT E.G. ADA. POWER SUPPLIES, ETC. WIRE COMPLETELY TO ALL POWER AND ACCESS CONTROL RELATED DOOR HARDWARE EQUIPMENT. COORDINATE EXACT LOCATION OF JUNCTION BOXES WITH DOOR HARDWARE CONTRACTOR PRIOR TO ROUGH-IN.
P7	PROVIDE A HUBBELL CORD REEL HBL12512301R220 (25FT CORD WITH (2) 20A YELLOW DUPLEX RECEPTACLE END) WITH HUBBEL PLENUM RATED ENCLOSURE MOUNTED (HBLIPBOX) WITHIN THE CEILING TILE GRID.
P8	OUTLET CONTROLLED THROUGH RELAY PANEL/CORRIDOR LIGHTING RELAY CONTROL SYSTEM VIA LOW VOLTAGE WALLSTATION 'EXT OUT - 'EXT. OUT.' WALLSTATIONS LOCATED WITHIN RECEPTION 1102, SOUTH EAST GYMNASIUM SWITCHING CABINET, AND CUSTODIAL OFFICE 1223.
P17	LOCATE OUTLET WITHIN BASE CABINET. FIELD COORDINATE EXACT LOCATION AND ELEVATION WITH MILLWORK SHOP DRAWINGS.
P22	COORDINATE EXACT MOUNTING HEIGHT AND DETAILS OF 3D PRINTER POWER AND DATA WITHIN DISPLAY CASE WITH ARCHITECTURAL DETAIL.
P23	COORDINATE FINAL ELECTRICAL REQUIREMENTS OF MAKERBOT PLUS MODEL WITH OWNER PRIOR TO ROUGH-IN.
P24	COORDINATE FINAL ELECTRICAL REQUIREMENTS OF GLOWFORGE LASER CUTTER WITH OWNER PRIOR TO ROUGH-IN.
P25	PROVIDE JUNCTION BOX AND STUB-UP 1" CONDUIT ABOVE ACCESSIBLE CEILING FOR FUTURE DATA.
P26	PROVIDE POWER AND CONNECTION FOR WALL MOUNTED CHANGING TABLE. COORDINATE EXACT HEIGHT, LOCATION, AND TERMINATION REQUIREMENTS WITH ARCHITECT AND SHOP DRAWINGS PRIOR TO ELECTRICAL ROUGH-IN. PROVIDE UPDATED ELECTRICAL INFRASTRUCTURE AS REQUIRED.
P31	SPLIT AC SYSTEM. PROVIDE 3/4" CONDUIT AND REQUIRED UNIT WIRING BETWEEN OUTDOOR AND INDOOR UNIT. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL CONDUIT AND WIRING. COORDINATE LOCATION TERMINATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
P34	PROVIDE DISPLAY BOX AND ASSOCIATED ELECTRICAL ROUGH-IN AS SHOWN. COORDINATE DISPLAY BOX LOCATION AND HEIGHT WITH OWNER PROVIDED MOUNT AND INTERACTIVE DISPLAY PRIOR TO ANY ROUGH-IN. BOX SHALL BE MOUNTED BETWEEN PLYWOOD DISPLAY BACKING. SEE TA SERIES OF DRAWINGS FOR ADDITIONAL REQUIREMENTS.
P35	PROVIDE FLOOR BOX/POKE THROUGH BOXES AS SHOWN. VERIFY LOCATION WITH ARCHITECT, FURNITURE, AND OWNER PRIOR ROUGH-IN.
P45	PROVIDE CONNECTION TO HEAT TRACE ON PRIMARY AND SECONDARY ROOF DRAIN PIPING. FIELD VERIFY DOWNSPOUT LOCATION PRIOR TO ROUGH-IN. COORDINATE WITH DIVISION 23 PRIOR TO INSTALL.


1HC1-17,19,21
HEAT TRACE
(1) 3/4" C. (POWER)
(1) 1" C. (DATA)
(1) 1-1/4" (AV)
(1) 1" C. (SPARE)
1LC1-15
1LC1-11
1LC1-9
1LC1-19
1LC1-13
1LC1-17
1LC1-1
1LC1-3
1LC3-25
1LC2-25
1LA2-25
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1LC3-19
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1LC1-2
1LC1-21
1HC1
1LC1
1HCT
1DPHCT
1DPDFLCT
1DPDCT
1LC2-10
1LC2-12
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1LC3-104

MOTION MOUNT
MULLION MOUNT
MULLION MOUNT
MULLION MOUNT
KINDERGARTEN CLASSROOM 1313
KINDERGARTEN CLASSROOM 1314
PRE-SCHOOL CLASSROOM 1305
PRE-SCHOOL CLASSROOM 1306
TEACHER COLLABORATION 1311
CORRIDOR 1300
STORAGE 1317
STORAGE 1304
TOILET 1315
TOILET 1316
TOILET 1303
TOILET 1302
STAIRS 1301
THINK TANK 1307
ELEC 1333
TELECOM 1332
TOILET 1327
FAMILY TOILET 1330
CORE
STORAGE 1324
TOILET 1325
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SENSORY ROOM 1310
STORAGE 1314
FUNCTIONAL SKILLS 1308
STORAGE 1306
STEAM STORAGE 1334
SITE TECH OFFICE 1331
VESTIBULE 1329
STEAM LAB 1335
STEAM LAB 1333
2 E204
1312-H
1308-H
1302A-H
1306A-H
1336A-J
1336B-D
1336B-C
1429B-C
M01B
M03A
M03B
M03C
M03D
M03E
M03F
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M05O
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M05X
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M05Z

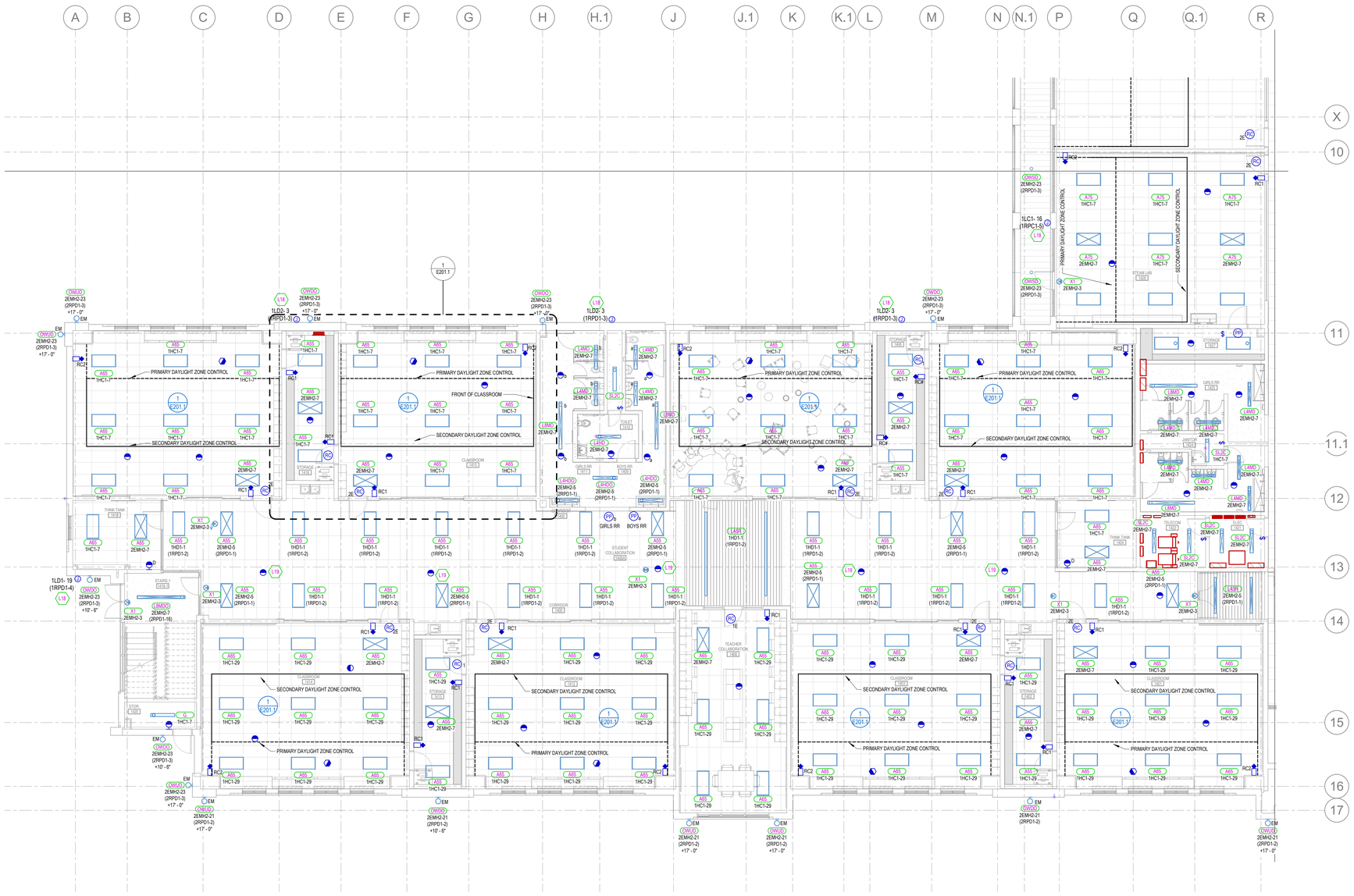
LIGHTING SHEET NOTES

1. DEVICE HEIGHTS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL ROUGH-IN ELEVATION HEIGHTS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUGH-IN DEVICES 6" ABOVE DESKTOPS,COUNTERS, ETC.
2. REFFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. FOR AREAS WITHOUT CEILINGS, FIXTURE LOCATIONS ARE DIAGRAMMATIC. THE INTENT IS TO ALIGN, CENTER, OR SPACE FIXTURES BETWEEN ARCHITECTURAL AND STRUCTURAL ELEMENTS.. CONTRACTOR TO PAINT EXPOSED RACEWAY TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY EXACT FIXTURE LENGTHS FOR CONTINUOUS ILLUMINATION FOR COVES AND LINEAR RUNS. PROVIDE CONTINUOUS ILLUMINATION WITH NO MORE THAN A 1" GAP BETWEEN THE END OF THE EDGE OF THE WALL / CEILING AND THE FIXTURE
4. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR PLACEMENT OF FIXTURES WITHIN MECHANICAL ROOMS.
5. ALL ROOM CONTROLLERS AND/OR POWER PACKS SHALL BE INSTALLED IN THE CEILING SPACE DIRECTLY ABOVE THE ENTRY DOOR TO THE SPACE IT IS CONTROLLING.
6. SEE CORRESPONDING LIGHTING DIAGRAMS FOR GENERAL INSTALLATION.
7. REQUIREMENTS, CONNECTIONS, AND CABLE TYPES.
8. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO ALL EMERGENCY POWER CONTROL DEVICES FOR PROPER POWER SENSING.
9. PROVIDE UNSWITCHED HOT AHEAD OF RELAY, OCCUPENCY SENSOR, OR SWITCH TO ALL EXIT SIGNS.
10. IF SHOWN, SUBSCRIPT NEAR LIGHT FIXTURES INDICATES CONTROL INTENT. PROVIDE LIGHTING CONTROLLERS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS NEEDED
11. PROVIDE 0-10V DIMMING FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE WALLSTATION CONTROL SEQUENCE AND OR BY TYPE OF CONTROL INTERFACE SHOWN.
12. ALL 277V LIGHTING CIRCUITS TERMINATING AT LIGHTING CONTROL PANELS SHALL HAVE A MINIMUM LENGTH OF 20 FEET BETWEEN LIGHTING CONTROL PANEL AND BRANCH LIGHTING PANEL.
13. CAREFULLY COORDINATE FIXTURE PLACEMENT WITHIN BAFFLED CEILINGS. PENDANT MOUNTING FIXTURE SHALL BE MOUNTED AT THE SAME ELEVATION AS BAFFLES. COORDINATE WITH ARCHITECTURAL RCP AND DETAILS PRIOR TO ROUGH-IN.
14. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
15. ALL UNDERCABINET LIGHTS MUST BE COORDINATED WITH MILLWORK FOR EXACT LENGTHS. COORDINATE WITH MILLWORK SHOP DRAWINGS.
16. PROVIDE 0-10V DIMMER CONDUCTORS FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE RELAY PANEL SCHEDULE, WALL STATION CONTROL SEQUENCE., OR REQUIRED BY IECC 2021.
17. SUBSCRIPT ADJACENT TO LIGHT FIXTURE INDICATES INTENDED CONTROL GROUPING. PROVIDE LIGHTING CONTROLS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS. PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS REQUIRED.
18. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURE'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

SHEET KEYNOTES

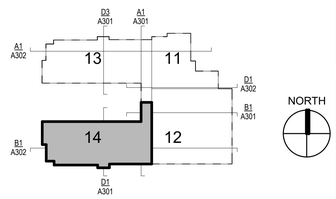
L18 CIRCUIT EXTERIOR DUPLEX OUTLET THROUGH AREA RELAY PANEL. EXTERIOR OUTLETS CONTROLLED VIA LOW VOLTAGE CONTROL SWITCH 'RCO' AND PROGRAMMED PER OWNER REQUIREMENTS.

L19 PROVIDE EXTENDED RANGE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN THROUGHOUT CORRIDORS. PROVIDE 0-10V DIMMING ON ALL CORRIDOR LIGHTING RELAYS. OCCUPANCY SENSOR SHALL DIM CORRIDOR RELAY TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. LOCATE OCCUPANCY SENSOR SENSOR(S) PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.



LEVEL 01 - LIGHTING RCP - AREA 14
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - LIGHTING PLAN - AREA 14

E114.1

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POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
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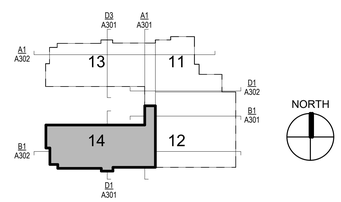
LEVEL 01 - POWER FP - AREA 14
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - POWER PLAN - AREA 14

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SYSTEMS GENERAL NOTES

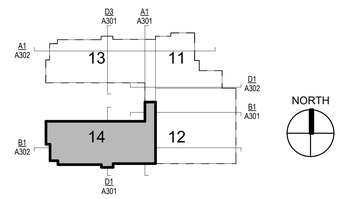
1. FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY AND BASED UPON A PERFORMANCE SPECIFICATION. ALL NEW EQUIPMENT/DEVICE QUANTITIES, LOCATION, AND ALL NATIONAL & LOCAL CODE COMPLIANCE TO BE PROVIDED AND STAMPED BY A LICENSED FIRE ALARM ENGINEER AND INCLUDED IN THE FIRE ALARM CONTRACTORS BID. IN NO WAY ARE THE DEVICES SHOWN ON THESE DRAWINGS TO BE IMPLEMENTED AS FINAL DESIGN DOCUMENTS
2. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, PRECAST CONCRETE, MASONRY AND GYP WALLS.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT QUANTITY AND LOCATIONS OF ALL FIRE SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES WITH FIRE SPRINKLER DRAWINGS. CONNECT ALL TAMPER AND FLOW SWITCHES TO FIRE ALARM SYSTEM.
4. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND QUANTITY OF ALL DUCT TYPE SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. HARD WIRE TO RELAY STARTER.
5. REGARDLESS OF WHAT IS SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATIONS FOR MAGNETIC DOOR HOLDER AND OPERATION REQUIREMENTS. ALL VISUAL DEVICES SHALL BE SYNCHRONIZED WITHIN THE BUILDING REGARDLESS OF PROJECT SCOPE BOUNDARIES.
6. PROVIDE FIRE ALARM RELAY MODULES FOR ALL DOORS WITH ACCESS CONTROL DEVICES.
7. PROVIDE (2) DUCT TYPE SMOKE DETECTOR FOR EACH FAN COIL UNIT, AHU, SUPPLY FAN AND HEAT PUMP OF 2000 CFM OR GREATER.
8. PROVIDE 120V CIRCUIT FROM THE NEAREST EQUIPMENT BRANCH PANELBOARD FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER. REFER TO DIAGRAM D012.
9. COORDINATE EXACT LOCATIONS OF CREDENTIAL CARD READERS AND ADA CONTROLS STATIONS WITH ARCHITECTURAL & SYSTEM DRAWINGS PRIOR TO ROUGH-IN. PROVIDE ALL CREDENTIAL CARD READER LOCATIONS AS REQUIRED PER ENTIRE CONSTRUCTION DOCUMENTS.
10. COORDINATE CLOSELY WITH THE DIV.8 COMMERCIAL DOOR AND HARDWARE CONTRACTOR TO ASSURE PROPER PLACEMENT OF ELECTRIFIED DOOR HARDWARE EQUIPMENT.
11. PROVIDE RACEWAY, CONDUIT, AND WIRING FOR SECURITY DEVICES INDICATED. PROVIDE CONCEALED 3/4" C TYPICAL FOR LINES SHOWN TO SECURITY DEVICES. COORDINATE ALL JUNCTION BOX ROUGH-IN LOCATIONS WITH THE OWNER AND ACCESS SYSTEM CONTROL SYSTEM SUPPLIER PRIOR TO ANY ROUGH- IN.
12. DIV. 8 AND DIV 28 CONTRACTORS SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO OUTLINE POWER REQUIREMENTS AND CABLING FOR ALL ELECTRONIC ACCESS CONTROL EQUIPMENT AND EXACT DEVICE LOCATIONS.
13. PROVIDE ONE 4SQ J-BOX AND COVER ON PROTECTED SIDE OF DOORWAY IN ACCESSIBLE CEILING SPACE OR IN ANOTHER ACCESSIBLE LOCATION. PROVIDE HANDY BOX IN DOOR JAM, AND MOUNT BEFORE GROUTED. DRILL A 1/8" PILOT HOLE FOR DEVICE MOUNTING.
14. ALL CABLING TO DEVICES THAT ARE INSTALLED ON DOOR FRAMES OR MULLIONS SHALL BE ROUTED THROUGH THE INSIDE OF THE DOOR FRAME & MULLIONS. COORDINATE INSTALLATION WITH THE DOOR/WINDOW CONTRACTOR PRIOR TO ANY ROUGH-IN.
15. ELECTRONIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, CRASH BARS, ETC.) SHALL BE PROVIDED BY DIV. 8. REVIEW THE DOOR HARDWARE SCHEDULE TO VERIFY THE OPERATIONAL FUNCTIONALITY AND THE LOCK VOLTAGES WILL WORK FOR EACH DOOR.
16. POWER SUPPLIES FOR ELECTRIFIED LOCKS AND ACCESS CONTROL DEVICES SHALL BE PROVIDED BY THE DIV. 28 CONTRACTOR. COORDINATE WITH THE DIV.8 CONTRACTOR FOR EXACT POWER REQUIREMENTS.
17. ALL ACCESS CONTROL SYSTEM CABLING SHALL BE RAN BACK TO THE ASSOCIATED HEAD-END AND/OR SLAVE PANELS AND POWER SUPPLIES THAT ARE CENTRALLY LOCATED IN EF/ER/TR(MDF/IDF) ROOMS. ALTERNATE CONFIGURATIONS MAY BE ACCEPTABLE PROVIDED THAT THE CONTRACTOR SUBMITS A WRITTEN APPROVAL AND ALLOWS FOR ANY INCREASES FOR WIRING & EQUIPMENT AND SUBMITS PLAN DRAWINGS THAT SHOW THE NEW CONFIGURATION.
18. HEAD-END ACCESS CONTROL PANELS AND SUFFICIENT CONTROLLER BOARDS TO SERVICE THE NUMBER OF ACCESS DOORS SHOWN SHALL BE MOUNTED ON 4X8 FIRE RATED PLYWOOD BACKER.
19. THE ACCESS CONTROL SYSTEM SHALL INCLUDE RELAYS, EXTERNAL POWER SUPPLIES, AUXILIARY DEVICES OR INPUT/OUTPUT MODULES THAT ARE REQUIRED TO SUPPORT THE DOOR TYPES THAT ARE INDICATED FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL CARD READER AND DOOR CONTROL SYSTEM. THE REQUEST TO EXITS, DOOR CONTACTS, AND INDICATOR CIRCUITS SHALL BE SUPERVISED FOR OPEN CIRCUIT OR SHORT CIRCUIT FAULTS BETWEEN THE DEVICE CONTACTS AND THE ACCESS CONTROLLER.
20. ALL SECURITY CAMERAS SHOWN SHALL HAVE ONE CAT6A CABLE INSTALLED BY THE LOW VOLTAGE CONTRACTOR, WITH 10'-0" SERVICE LOOPS AT EACH CAMERA LOCATION AND BACK WHERE IT WILL BE TERMINATED IN THE EF/ER/TR(MDF/IDF) ROOMS, SO EQUIPMENT CAN BE MOVE OR RELOCATED IF REQUIRED.
21. THE SECURITY CONTRACTORS SHALL FOLLOW ALL OF THE MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS, & INSTRUCTIONS, AND THE OWNER'S REQUIREMENTS AND INSTRUCTIONS.
22. THE SECURITY CONTRACTORS SHALL INSTALL ALL EQUIPMENT USING INDUSTRIES BEST STANDARDS & PRACTICES.
23. ALL EXTERIOR DOORS, GARAGE DOORS, ROOF HATCHS OR ACCESS DOORS, EF/ER/TR (MDF/IDF) ROOM DOORS, RISER ROOMS, AND ANY DOOR EQUIPPED WITH A CREDENTIAL CARD READER, MUST HAVE A SEPARATE DOOR CONTACT FOR THE ACCESS CONTROL SYSTEM AND THE INTRUSION DETECTION SYSTEM.
24. SECURITY INTEGRATOR SHALL COORDINATE ALL DOOR HARDWARE WITH THE DIV.8 CONTRACTOR FOR LOCK TYPES, POWER SUPPLIES, AND ANY MISCELLANEOUS EQUIPMENT NECESSARY. CAREFULLY REVIEW DOOR HARDWARE SUBMITTAL AND SUMMARIZE DISCREPANCIES TO TEAM ASAP.
25. EQUIPMENT COUNTS ARE PROVIDED FOR INFORMATION ONLY AT A CONVENIENCE TO THE CONTRACTOR. IT STILL REMAINS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DRAWING QUANTITIES. IF A DISCREPANCY ARISES BETWEEN THE SCHEDULE COUNTS AND THE DRAWING COUNTS, THE HIGHEST QUANTITY SHALL BE INCLUDED IN THE BID. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE ALL SPECIFIED AND NON-SPECIFIED COMPONENTS NEEDED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.
26. PROVIDE FIRE ALARM INTERFACE WITH THE ACCESS CONTROL SYSTEM SO TO UNLOCK ALL INDICATED LOCKS UPON ANY FIRE ALARM INITIATION.
27. REFER TO THE SPECIFICATIONS FOR THE INTEGRATION & TIE-IN REQUIREMENTS BETWEEN SYSTEMS (VIDEO SURVEILLANCE SYSTEMS, ACCESS CONTROL SYSTEMS, INTRUSION DETECTION SYSTEMS, AND FIRE ALARM SYSTEMS, ETC.)
28. SECURITY INTEGRATOR SHALL CAREFULLY REVIEW THE REFLECTED CEILING PLANS, ARCHITECTURAL ELEVATIONS, AND MILLWORK DRAWINGS FOR ALL DEVICE & COMPONENT INSTALLATION PRIOR TO INSTALLING ANY EQUIPMENT.
29. ALL CAMERAS AND CAMERA MOUNTING HARDWARE ARE GOING TO BE OWNER FURNISHED, AND CONTRACTOR INSTALLED. CONTRACTOR SHALL PAINT MOUNTING HARDWARE AND CAMERAS TO MATCH THE BUILDING MOUNTING SURFACE COLOR. COORDINATE COLORS WITH ARCHITECT PRIOR TO PREP AND PAINTING.
30. CONTRACTOR SHALL VERIFY ALL CAMERA LOCATIONS, HEIGHTS, ORIENTATIONS, AND VIEWS WITH THE SCHOOL DISTRICT PRIOR TO STARTING ANY WORK TO ENSURE IDEAL VIEWS FOR EACH CAMERA.

SHEET KEYNOTES

Y4	DOOR HOLDERS AND KEYED SWITCH SUPPLIED BY DOOR HARDWARE SUPPLIER AND INSTALLED BY DIVISION 26. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLIES(IF REQUIRED), HOLD OPENS, KEYED SWITCHE(S), ACCESS CONTROL, FIRE ALARM CONTROL AND 24VDC POWER CIRCUIT. COORDINATE DOOR HOLDERS LOCATION WITH DOOR HARDWARE SCHEDULES. FIRE ALARM CONTROL MODULE SHALL RELEASE DOORS UPON ACTIVATION OF AN ALARM OR LOCKDOWN.
Y6	DOOR HOLDERS LOCATIONS. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLIES(IF REQUIRED), HOLD OPENS, ACCESS CONTROL, FIRE ALARM CONTROL AND 24VDC POWER CIRCUIT. COORDINATE DOOR HOLDERS LOCATION WITH DOOR HARDWARE SCHEDULES. FIRE ALARM CONTROL MODULE SHALL RELEASE DOORS UPON ACTIVATION OF AN ALARM OR LOCKDOWN.
Y12	SURVEILLANCE CAMERA LOCATIONS THAT ARE SHOWN ON PLANS ARE FOR ROUGH-IN ONLY (CONDUIT & CAT6 CABLING). OGDEN SCHOOL DISTRICT WILL BE PROVIDING ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT. SECURITY CONTRACTOR TO INSTALL ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT, AND OGDEN SCHOOL DISTRICT WILL BE PROGRAMING THE SURVEILLANCE CAMERAS AND EQUIPMENT.

LEVEL 01 - SYSTEMS FP - AREA 14
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION
1	11/15/23	Addendum #1

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - SYSTEMS PLAN - AREA 14

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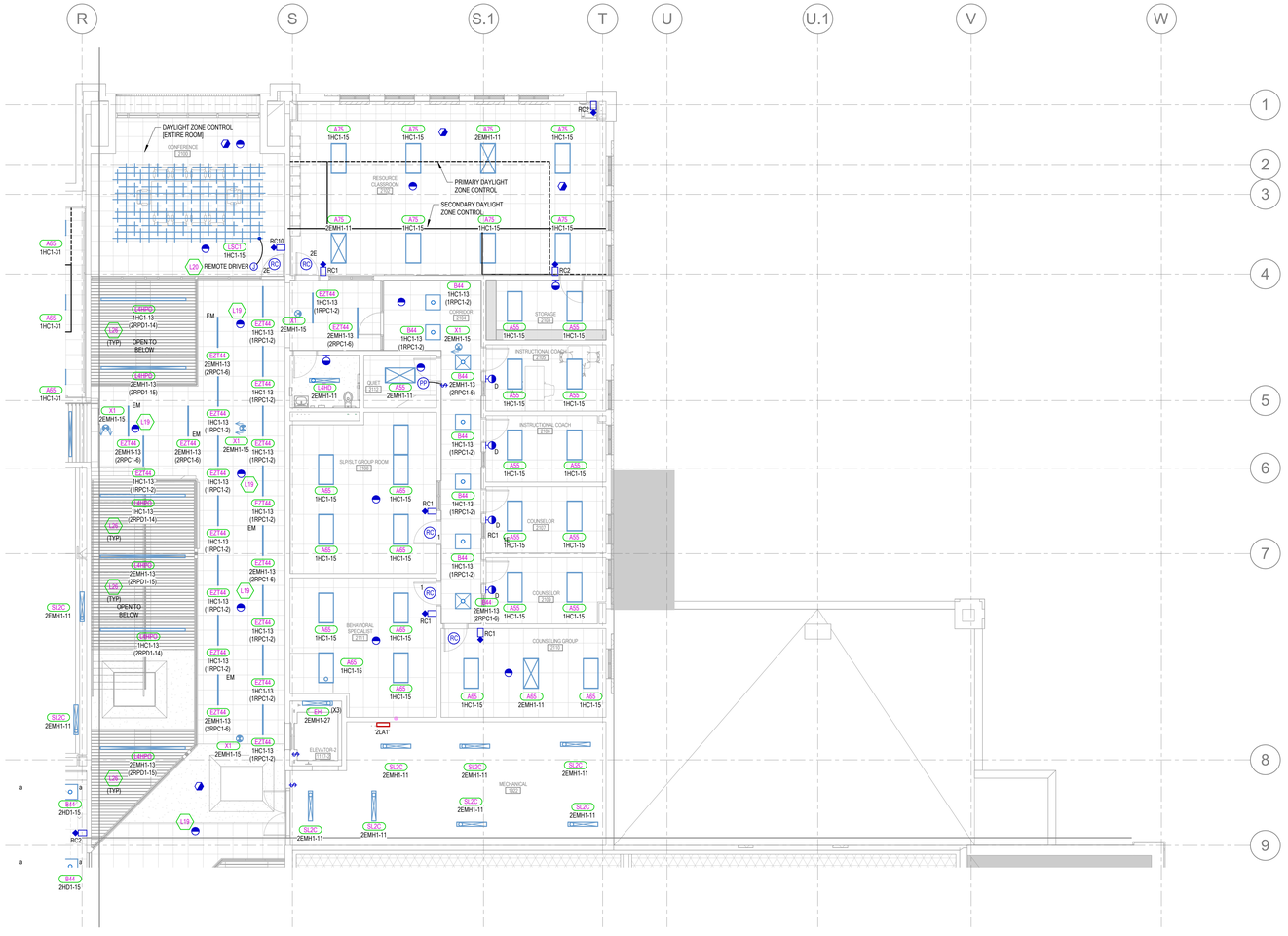
LIGHTING SHEET NOTES

1. DEVICE HEIGHTS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL ROUGH-IN ELEVATION HEIGHTS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUGH-IN DEVICES 6" ABOVE DESKTOPS,COUNTERS, ETC.
2. REFFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. FOR AREAS WITHOUT CEILINGS, FIXTURE LOCATIONS ARE DIAGRAMMATIC. THE INTENT IS TO ALIGN, CENTER, OR SPACE FIXTURES BETWEEN ARCHITECTURAL AND STRUCTURAL ELEMENTS.. CONTRACTOR TO PAINT EXPOSED RACEWAY TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY EXACT FIXTURE LENGTHS FOR CONTINUOUS ILLUMINATION FOR COVES AND LINEAR RUNS. PROVIDE CONTINUOUS ILLUMINATION WITH NO MORE THAN A 1" GAP BETWEEN THE END OF THE EDGE OF THE WALL / CEILING AND THE FIXTURE
4. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR PLACEMENT OF FIXTURES WITHIN MECHANICAL ROOMS.
5. ALL ROOM CONTROLLERS AND/OR POWER PACKS SHALL BE INSTALLED IN THE CEILING SPACE DIRECTLY ABOVE THE ENTRY DOOR TO THE SPACE IT IS CONTROLLING.
6. SEE CORRESPONDING LIGHTING DIAGRAMS FOR GENERAL INSTALLATION.
7. REQUIREMENTS, CONNECTIONS, AND CABLE TYPES.
8. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO ALL EMERGENCY POWER CONTROL DEVICES FOR PROPER POWER SENSING.
9. PROVIDE UNSWITCHED HOT AHEAD OF RELAY, OCCUPENCY SENSOR, OR SWITCH TO ALL EXIT SIGNS.
10. IF SHOWN, SUBSCRIPT NEAR LIGHT FIXTURES INDICATES CONTROL INTENT. PROVIDE LIGHTING CONTROLLERS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS NEEDED
11. PROVIDE 0-10V DIMMING FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE WALLSTATION CONTROL SEQUENCE AND OR BY TYPE OF CONTROL INTERFACE SHOWN.
12. ALL 277V LIGHTING CIRCUITS TERMINATING AT LIGHTING CONTROL PANELS SHALL HAVE A MINIMUM LENGTH OF 20 FEET BETWEEN LIGHTING CONTROL PANEL AND BRANCH LIGHTING PANEL.
13. CAREFULLY COORDINATE FIXTURE PLACEMENT WITHIN BAFFLED CEILINGS. PENDANT MOUNTING FIXTURE SHALL BE MOUNTED AT THE SAME ELEVATION AS BAFFLES. COORDINATE WITH ARCHITECTURAL RCP AND DETAILS PRIOR TO ROUGH-IN.
14. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
15. ALL UNDERCABINET LIGHTS MUST BE COORDINATED WITH MILLWORK FOR EXACT LENGTHS. COORDINATE WITH MILLWORK SHOP DRAWINGS.
16. PROVIDE 0-10V DIMMER CONDUCTORS FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE RELAY PANEL SCHEDULE, WALL STATION CONTROL SEQUENCE,, OR REQUIRED BY IECC 2021.
17. SUBSCRIPT ADJACENT TO LIGHT FIXTURE INDICATES INTENDED CONTROL GROUPING. PROVIDE LIGHTING CONTROLS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS. PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS REQUIRED.
18. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURE'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

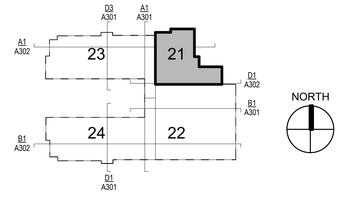
SHEET KEYNOTES

L19	PROVIDE EXTENDED RANGE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN THROUGHOUT CORRIDORS. PROVIDE 0-10V DIMMING ON ALL CORRIDOR LIGHTING RELAYS. OCCUPANCY SENSOR SHALL DIM CORRIDOR RELAY TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. LOCATE OCCUPANCY SENSOR SENSOR(S) PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.
L20	PROVIDE AND LOCATE REMOTE DRIVERS FOR LIGHT FIXTURE WITHIN CABINET ABOVE ACCESSIBLE LAY-IN CEILING GRID. PROVIDE NECESSARY LV CABLING BETWEEN REMOTE DRIVER AND FIXTURES. ACCOUNT FOR VOLTAGE DROP AS REQUIRED.
L26	PROVIDE FIXTURES WITH BUILT IN HIGH CEILING OCCUPANCY AND DAYLIGHT SENSORS TO CONTROL LIGHTS THROUGHOUT THE MAIN 2-STORY CORRIDOR. OCCUPANCY SENSOR SHALL DIM LIGHTS TO 50% OUTPUT AFTER 30 MINUTES OF INACTIVITY. DAYLIGHT HARVESTING SHALL BE ACTIVATE AT ALL TIMES.



LEVEL 02 - LIGHTING RCP - AREA 21
SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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VCBO NUMBER: 22785
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DATE: NOVEMBER 08 2023

BRIAN HICKS — No. 7799837-5301 — 11/15/2023 — STATE OF UTAH — PROFESSIONAL ENGINEER

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - LIGHTING PLAN - AREA 21

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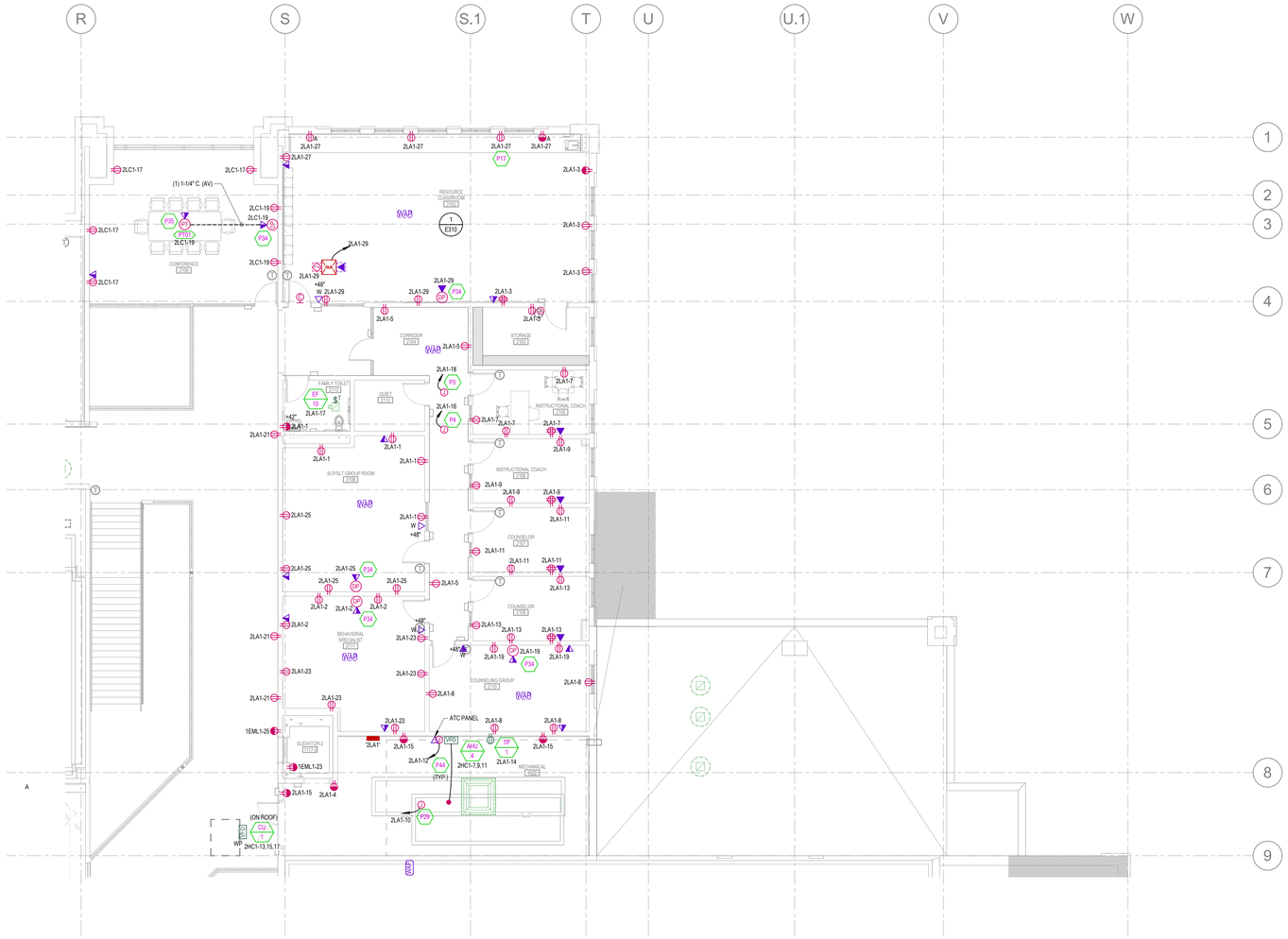


LEVEL 02 - POWER FP - AREA 21
SCALE = 1/8" = 1'-0"

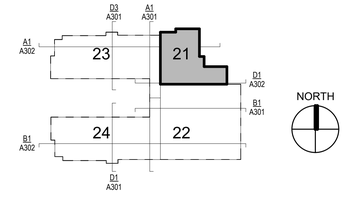
POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.

SHEET KEYNOTES

P3	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR VAV CONTROL TRANSFORMER. CONTROLS CONTRACTOR TO MAKE CONNECTION TO CONTROL TRANSFORMER AND VAV BOXES. COORDINATE EXACT LOCATION OF JUNCTION BOXES WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
P4	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE/SMOKE DAMPERS. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
P17	LOCATE OUTLET WITHIN BASE CABINET. FIELD COORDINATE EXACT LOCATION AND ELEVATION WITH MILLWORK SHOP DRAWINGS.
P29	PROVIDE 120V POWER CONNECTION FOR INTEGRATED LIGHT FIXTURES AND RECEPTACLES FURNISHED AS PART OF MECHANICAL EQUIPMENT UNIT. COORDINATE WITH SHOP DRAWINGS FOR EXACT LOCATION OF JUNCTION BOX PRIOR TO ROUGH-IN.
P34	PROVIDE DISPLAY BOX AND ASSOCIATED ELECTRICAL ROUGH-IN AS SHOWN. COORDINATE DISPLAY BOX LOCATION AND HEIGHT WITH OWNER PROVIDED MOUNT AND INTERACTIVE DISPLAY PRIOR TO ANY ROUGH-IN. BOX SHALL BE MOUNTED BETWEEN PLYWOOD DISPLAY BACKING. SEE TA SERIES OF DRAWINGS FOR ADDITIONAL REQUIREMENTS.
P35	PROVIDE FLOOR BOX/POKE THROUGH BOXES AS SHOWN. VERIFY LOCATION WITH ARCHITECT, FURNITURE, AND OWNER PRIOR ROUGH-IN.
P44	FIELD COORDINATE FINAL ELECTRICAL EQUIPMENT LOCATIONS WITHIN MECHANICAL ROOM WITH GENERAL CONTRACTOR AND MECHANICAL CONTRACTOR TO VERIFY FIELD ROUTING OF ALL MECHANICAL PIPING/DUCTWORK WITHIN THE SPACE AND ADJUST PANELBOARD LOCATIONS ACCORDINGLY.

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - POWER PLAN - AREA 21

E121.2

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LEVEL 02 - SYSTEMS FP - AREA 21
SCALE = 1/8" = 1'-0"

SYSTEMS GENERAL NOTES

1. FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY AND BASED UPON A PERFORMANCE SPECIFICATION. ALL NEW EQUIPMENT/DEVICE QUANTITIES, LOCATION, AND ALL NATIONAL & LOCAL CODE COMPLIANCE TO BE PROVIDED AND STAMPED BY A LICENSED FIRE ALARM ENGINEER AND INCLUDED IN THE FIRE ALARM CONTRACTORS BID. IN NO WAY ARE THE DEVICES SHOWN ON THESE DRAWINGS TO BE IMPLEMENTED AS FINAL DESIGN DOCUMENTS
2. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, PRECAST CONCRETE, MASONRY AND GYP WALLS.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT QUANTITY AND LOCATIONS OF ALL FIRE SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES WITH FIRE SPRINKLER DRAWINGS. CONNECT ALL TAMPER AND FLOW SWITCHES TO FIRE ALARM SYSTEM.
4. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND QUANTITY OF ALL DUCT TYPE SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. HARD WIRE TO RELAY STARTER.
5. REGARDLESS OF WHAT IS SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATIONS FOR MAGNETIC DOOR HOLDER AND OPERATION REQUIREMENTS. ALL VISUAL DEVICES SHALL BE SYNCHRONIZED WITHIN THE BUILDING REGARDLESS OF PROJECT SCOPE BOUNDARIES.
6. PROVIDE FIRE ALARM RELAY MODULES FOR ALL DOORS WITH ACCESS CONTROL DEVICES.
7. PROVIDE (2) DUCT TYPE SMOKE DETECTOR FOR EACH FAN COIL UNIT, AHU, SUPPLY FAN AND HEAT PUMP OF 2000 CFM OR GREATER.
8. PROVIDE 120V CIRCUIT FROM THE NEAREST EQUIPMENT BRANCH PANELBOARD FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER. REFER TO DIAGRAM D012.
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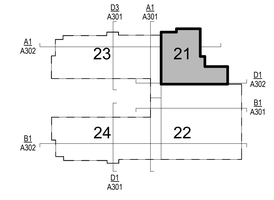
12. DIV. 8 AND DIV 28 CONTRACTORS SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO OUTLINE POWER REQUIREMENTS AND CABLING FOR ALL ELECTRONIC ACCESS CONTROL EQUIPMENT AND EXACT DEVICE LOCATIONS.
13. PROVIDE ONE 4SQ J-BOX AND COVER ON PROTECTED SIDE OF DOORWAY IN ACCESSIBLE CEILING SPACE OR IN ANOTHER ACCESSIBLE LOCATION. PROVIDE HANDY BOX IN DOOR JAM, AND MOUNT BEFORE GROUTED. DRILL A 1/8" PILOT HOLE FOR DEVICE MOUNTING.
14. ALL CABLING TO DEVICES THAT ARE INSTALLED ON DOOR FRAMES OR MULLIONS SHALL BE ROUTED THROUGH THE INSIDE OF THE DOOR FRAME & MULLIONS. COORDINATE INSTALLATION WITH THE DOOR/WINDOW CONTRACTOR PRIOR TO ANY ROUGH-IN.
15. ELECTRONIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, CRASH BARS, ETC.) SHALL BE PROVIDED BY DIV. 8. REVIEW THE DOOR HARDWARE SCHEDULE TO VERIFY THE OPERATIONAL FUNCTIONALITY AND THE LOCK VOLTAGES WILL WORK FOR EACH DOOR.
16. POWER SUPPLIES FOR ELECTRIFIED LOCKS AND ACCESS CONTROL DEVICES SHALL BE PROVIDED BY THE DIV. 28 CONTRACTOR. COORDINATE WITH THE DIV.8 CONTRACTOR FOR EXACT POWER REQUIREMENTS.
17. ALL ACCESS CONTROL SYSTEM CABLING SHALL BE RAN BACK TO THE ASSOCIATED HEAD-END AND/OR SLAVE PANELS AND POWER SUPPLIES THAT ARE CENTRALLY LOCATED IN EF/ER/TR(MDF/IDF) ROOMS. ALTERNATE CONFIGURATIONS MAY BE ACCEPTABLE PROVIDED THAT THE CONTRACTOR SUBMITS A WRITTEN APPROVAL AND ALLOWS FOR ANY INCREASES FOR WIRING & EQUIPMENT AND SUBMITS PLAN DRAWINGS THAT SHOW THE NEW CONFIGURATION.
18. HEAD-END ACCESS CONTROL PANELS AND SUFFICIENT CONTROLLER BOARDS TO SERVICE THE NUMBER OF ACCESS DOORS SHOWN SHALL BE MOUNTED ON 4X8 FIRE RATED PLYWOOD BACKER.
19. THE ACCESS CONTROL SYSTEM SHALL INCLUDE RELAYS, EXTERNAL POWER SUPPLIES, AUXILIARY DEVICES OR INPUT/OUTPUT MODULES THAT ARE REQUIRED TO SUPPORT THE DOOR TYPES THAT ARE INDICATED FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL CARD READER AND DOOR CONTROL SYSTEM. THE REQUEST TO EXITS, DOOR CONTACTS, AND INDICATOR CIRCUITS SHALL BE SUPERVISED FOR OPEN CIRCUIT OR SHORT CIRCUIT FAULTS BETWEEN THE DEVICE CONTACTS AND THE ACCESS CONTROLLER.
20. ALL SECURITY CAMERAS SHOWN SHALL HAVE ONE CAT6A CABLE INSTALLED BY THE LOW VOLTAGE CONTRACTOR, WITH 10'-0" SERVICE LOOPS AT EACH CAMERA LOCATION AND BACK WHERE IT WILL BE TERMINATED IN THE EF/ER/TR(MDF/IDF) ROOMS, SO EQUIPMENT CAN BE MOVE OR RELOCATED IF REQUIRED.
21. THE SECURITY CONTRACTORS SHALL FOLLOW ALL OF THE MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS, & INSTRUCTIONS, AND THE OWNER'S REQUIREMENTS AND INSTRUCTIONS.
22. THE SECURITY CONTRACTORS SHALL INSTALL ALL EQUIPMENT USING INDUSTRIES BEST STANDARDS & PRACTICES.
23. ALL EXTERIOR DOORS, GARAGE DOORS, ROOF HATCHS OR ACCESS DOORS, EF/ER/TR (MDF/IDF) ROOM DOORS, RISER ROOMS, AND ANY DOOR EQUIPPED WITH A CREDENTIAL CARD READER, MUST HAVE A SEPARATE DOOR CONTACT FOR THE ACCESS CONTROL SYSTEM AND THE INTRUSION DETECTION SYSTEM.
24. SECURITY INTEGRATOR SHALL COORDINATE ALL DOOR HARDWARE WITH THE DIV.8 CONTRACTOR FOR LOCK TYPES, POWER SUPPLIES, AND ANY MISCELLANEOUS EQUIPMENT NECESSARY. CAREFULLY REVIEW DOOR HARDWARE SUBMITTAL AND SUMMARIZE DISCREPANCIES TO TEAM ASAP.
25. EQUIPMENT COUNTS ARE PROVIDED FOR INFORMATION ONLY AT A CONVENIENCE TO THE CONTRACTOR. IT STILL REMAINS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DRAWING QUANTITIES. IF A DISCREPANCY ARISES BETWEEN THE SCHEDULE COUNTS AND THE DRAWING COUNTS, THE HIGHEST QUANTITY SHALL BE INCLUDED IN THE BID. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE ALL SPECIFIED AND NON-SPECIFIED COMPONENTS NEEDED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.
26. PROVIDE FIRE ALARM INTERFACE WITH THE ACCESS CONTROL SYSTEM SO TO UNLOCK ALL INDICATED LOCKS UPON ANY FIRE ALARM INITIATION.
27. REFER TO THE SPECIFICATIONS FOR THE INTEGRATION & TIE-IN REQUIREMENTS BETWEEN SYSTEMS (VIDEO SURVEILLANCE SYSTEMS, ACCESS CONTROL SYSTEMS, INTRUSION DETECTION SYSTEMS, AND FIRE ALARM SYSTEMS, ETC.)
28. SECURITY INTEGRATOR SHALL CAREFULLY REVIEW THE REFLECTED CEILING PLANS, ARCHITECTURAL ELEVATIONS, AND MILLWORK DRAWINGS FOR ALL DEVICE & COMPONENT INSTALLATION PRIOR TO INSTALLING ANY EQUIPMENT.
29. ALL CAMERAS AND CAMERA MOUNTING HARDWARE ARE GOING TO BE OWNER FURNISHED, AND CONTRACTOR INSTALLED. CONTRACTOR SHALL PAINT MOUNTING HARDWARE AND CAMERAS TO MATCH THE BUILDING MOUNTING SURFACE COLOR. COORDINATE COLORS WITH ARCHITECT PRIOR TO PREP AND PAINTING.
30. CONTRACTOR SHALL VERIFY ALL CAMERA LOCATIONS, HEIGHTS, ORIENTATIONS, AND VIEWS WITH THE SCHOOL DISTRICT PRIOR TO STARTING ANY WORK TO ENSURE IDEAL VIEWS FOR EACH CAMERA.

SHEET KEYNOTES

Y1	MOUNT SMOKE DETECTOR WITHIN SKYLIGHT. COORDINATE MOUNTING DETAILS WITH ARCHITECTURAL SKYLIGHT DETAIL.
Y9	PROVIDE BEAM DETECTORS AS SHOWN ON PLANS. COORDINATE AND POSITION THEM ON AVAILABLE WALL SPACE WITH A CLEAR LINE OF SIGHT FOR OPTIMAL FUNCTIONALITY.
Y10	PROVIDE FIRE ALARM SYSTEM DUCT DETECTOR(S) AS REQUIRED. COORDINATE WITH DIVISION 23 CONTRACTOR FOR THE QUANTITY AND FOR MOUNTING IN MECHANICAL UNIT DUCT WORK.
Y12	SURVEILLANCE CAMERA LOCATIONS THAT ARE SHOWN ON PLANS ARE FOR ROUGH-IN ONLY (CONDUIT & CAT6 CABLING). OGDEN SCHOOL DISTRICT WILL BE PROVIDING ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT. SECURITY CONTRACTOR TO INSTALL ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT, AND OGDEN SCHOOL DISTRICT WILL BE PROGRAMING THE SURVEILLANCE CAMERAS AND EQUIPMENT.

KEY PLAN - UPPER LEVEL



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DATE: NOVEMBER 08 2023

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - SYSTEMS PLAN - AREA 21

E121.3

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LEVEL 02 - LIGHTING RCP - AREA 22

SCALE = 1/8" = 1'-0"

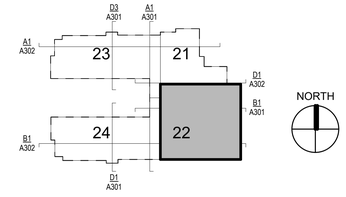
LIGHTING SHEET NOTES

1. DEVICE HEIGHTS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL ROUGH-IN ELEVATION HEIGHTS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUGH-IN DEVICES 6" ABOVE DESKTOPS,COUNTERS, ETC.
2. REFFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. FOR AREAS WITHOUT CEILINGS, FIXTURE LOCATIONS ARE DIAGRAMMATIC. THE INTENT IS TO ALIGN, CENTER, OR SPACE FIXTURES BETWEEN ARCHITECTURAL AND STRUCTURAL ELEMENTS.. CONTRACTOR TO PAINT EXPOSED RACEWAY TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY EXACT FIXTURE LENGTHS FOR CONTINUOUS ILLUMINATION FOR COVES AND LINEAR RUNS. PROVIDE CONTINUOUS ILLUMINATION WITH NO MORE THAN A 1" GAP BETWEEN THE END OF THE EDGE OF THE WALL / CEILING AND THE FIXTURE
4. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR PLACEMENT OF FIXTURES WITHIN MECHANICAL ROOMS.
5. ALL ROOM CONTROLLERS AND/OR POWER PACKS SHALL BE INSTALLED IN THE CEILING SPACE DIRECTLY ABOVE THE ENTRY DOOR TO THE SPACE IT IS CONTROLLING.
6. SEE CORRESPONDING LIGHTING DIAGRAMS FOR GENERAL INSTALLATION.
7. REQUIREMENTS, CONNECTIONS, AND CABLE TYPES.
8. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO ALL EMERGENCY POWER CONTROL DEVICES FOR PROPER POWER SENSING.
9. PROVIDE UNSWITCHED HOT AHEAD OF RELAY, OCCUPENCY SENSOR, OR SWITCH TO ALL EXIT SIGNS.
10. IF SHOWN, SUBSCRIPT NEAR LIGHT FIXTURES INDICATES CONTROL INTENT. PROVIDE LIGHTING CONTROLLERS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS NEEDED
11. PROVIDE 0-10V DIMMING FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE WALLSTATION CONTROL SEQUENCE AND OR BY TYPE OF CONTROL INTERFACE SHOWN.
12. ALL 277V LIGHTING CIRCUITS TERMINATING AT LIGHTING CONTROL PANELS SHALL HAVE A MINIMUM LENGTH OF 20 FEET BETWEEN LIGHTING CONTROL PANEL AND BRANCH LIGHTING PANEL.
13. CAREFULLY COORDINATE FIXTURE PLACEMENT WITHIN BAFFLED CEILINGS. PENDANT MOUNTING FIXTURE SHALL BE MOUNTED AT THE SAME ELEVATION AS BAFFLES. COORDINATE WITH ARCHITECTURAL RCP AND DETAILS PRIOR TO ROUGH-IN.
14. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
15. ALL UNDERCABINET LIGHTS MUST BE COORDINATED WITH MILLWORK FOR EXACT LENGTHS. COORDINATE WITH MILLWORK SHOP DRAWINGS.
16. PROVIDE 0-10V DIMMER CONDUCTORS FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE RELAY PANEL SCHEDULE, WALL STATION CONTROL SEQUENCE,, OR REQUIRED BY IECC 2021.
17. SUBSCRIPT ADJACENT TO LIGHT FIXTURE INDICATES INTENDED CONTROL GROUPING. PROVIDE LIGHTING CONTROLS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS. PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS REQUIRED.
18. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURE'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

SHEET KEYNOTES

L19	PROVIDE EXTENDED RANGE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN THROUGHOUT CORRIDORS. PROVIDE 0-10V DIMMING ON ALL CORRIDOR LIGHTING RELAYS. OCCUPANCY SENSOR SHALL DIM CORRIDOR RELAY TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. LOCATE OCCUPANCY SENSOR SENSOR(S) PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.
L20	PROVIDE AND LOCATE REMOTE DRIVERS FOR LIGHT FIXTURE WITHIN CABINET ABOVE ACCESSIBLE LAY-IN CEILING GRID. PROVIDE NECESSARY LV CABLING BETWEEN REMOTE DRIVER AND FIXTURES. ACCOUNT FOR VOLTAGE DROP AS REQUIRED.
L24	PROVIDE HIGH CEILING OCCUPANCY AND DAYLIGHT SENSORS TO CONTROL VESTIBULE LIGHT(S). PROVIDE 0-10V DIMMING FOR LIGHTING RELAY. OCCUPANCY SENSOR SHALL DIM VESTIBULE TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. DAYLIGHT HARVESTING SHALL BE ACTIVATE AT ALL TIMES.
L26	PROVIDE FIXTURES WITH BUILT IN HIGH CEILING OCCUPANCY AND DAYLIGHT SENSORS TO CONTROL LIGHTS THROUGHOUT THE MAIN 2-STORY CORRIDOR. OCCUPANCY SENSOR SHALL DIM LIGHTS TO 50% OUTPUT AFTER 30 MINUTES OF INACTIVITY. DAYLIGHT HARVESTING SHALL BE ACTIVATE AT ALL TIMES.

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - LIGHTING PLAN - AREA 22

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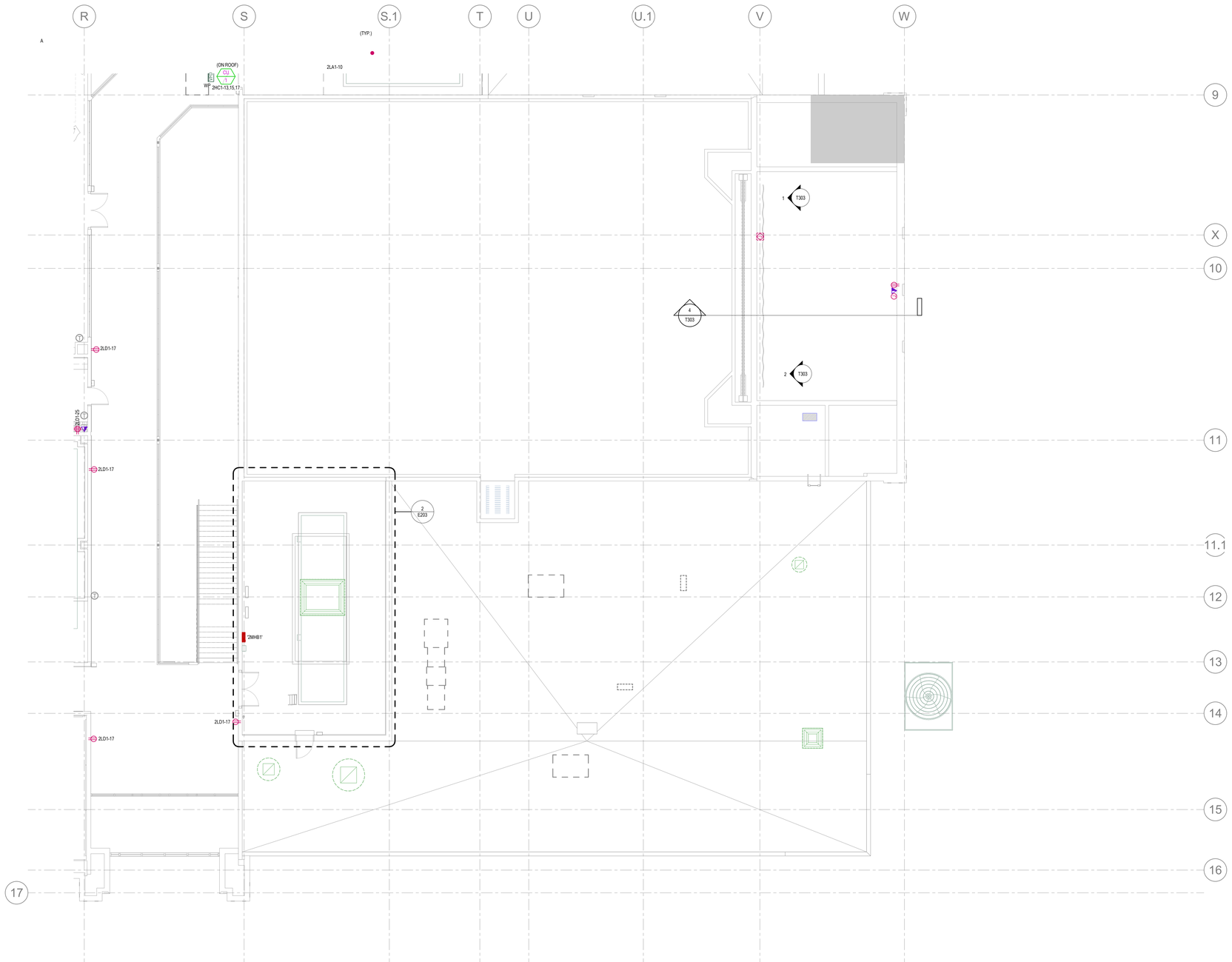


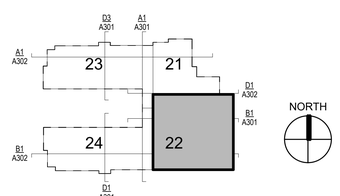
LEVEL 02 - POWER FP - AREA 22
SCALE = 1/8" = 1'-0"

POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.

SHEET KEYNOTES

KEY PLAN - UPPER LEVEL



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130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - POWER PLAN - AREA 22

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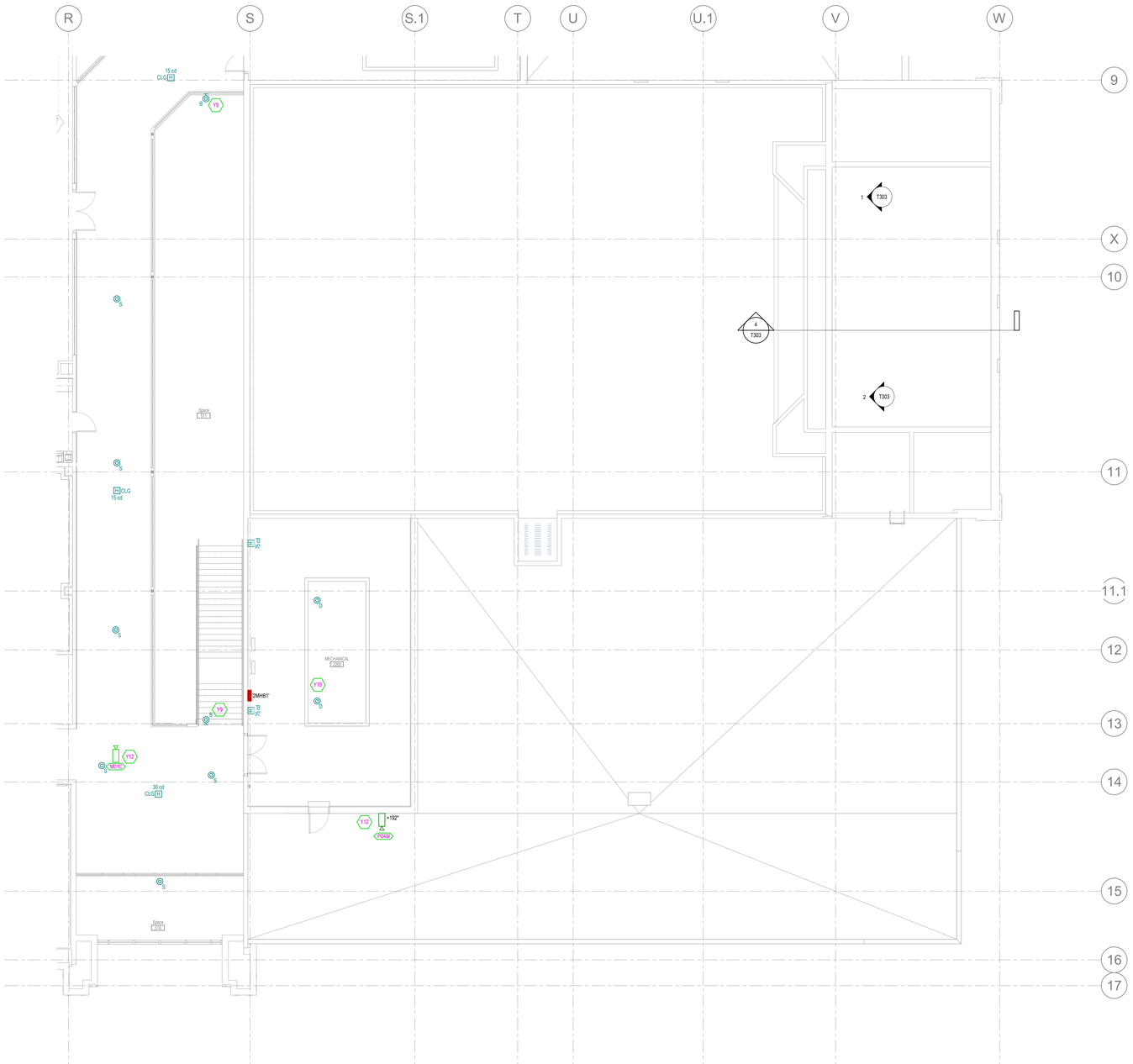

SYSTEMS GENERAL NOTES

1. FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY AND BASED UPON A PERFORMANCE SPECIFICATION. ALL NEW EQUIPMENT/DEVICE QUANTITIES, LOCATION, AND ALL NATIONAL & LOCAL CODE COMPLIANCE TO BE PROVIDED AND STAMPED BY A LICENSED FIRE ALARM ENGINEER AND INCLUDED IN THE FIRE ALARM CONTRACTORS BID. IN NO WAY ARE THE DEVICES SHOWN ON THESE DRAWINGS TO BE IMPLEMENTED AS FINAL DESIGN DOCUMENTS
2. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, PRECAST CONCRETE, MASONRY AND GYP WALLS.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT QUANTITY AND LOCATIONS OF ALL FIRE SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES WITH FIRE SPRINKLER DRAWINGS. CONNECT ALL TAMPER AND FLOW SWITCHES TO FIRE ALARM SYSTEM.
4. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND QUANTITY OF ALL DUCT TYPE SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. HARD WIRE TO RELAY STARTER.
5. REGARDLESS OF WHAT IS SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATIONS FOR MAGNETIC DOOR HOLDER AND OPERATION REQUIREMENTS. ALL VISUAL DEVICES SHALL BE SYNCHRONIZED WITHIN THE BUILDING REGARDLESS OF PROJECT SCOPE BOUNDARIES.
6. PROVIDE FIRE ALARM RELAY MODULES FOR ALL DOORS WITH ACCESS CONTROL DEVICES.
7. PROVIDE (2) DUCT TYPE SMOKE DETECTOR FOR EACH FAN COIL UNIT, AHU, SUPPLY FAN AND HEAT PUMP OF 2000 CFM OR GREATER.
8. PROVIDE 120V CIRCUIT FROM THE NEAREST EQUIPMENT BRANCH PANELBOARD FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER. REFER TO DIAGRAM D012.
9. COORDINATE EXACT LOCATIONS OF CREDENTIAL CARD READERS AND ADA CONTROLS STATIONS WITH ARCHITECTURAL & SYSTEM DRAWINGS PRIOR TO ROUGH-IN. PROVIDE ALL CREDENTIAL CARD READER LOCATIONS AS REQUIRED PER ENTIRE CONSTRUCTION DOCUMENTS.
10. COORDINATE CLOSELY WITH THE DIV.8 COMMERCIAL DOOR AND HARDWARE CONTRACTOR TO ASSURE PROPER PLACEMENT OF ELECTRIFIED DOOR HARDWARE EQUIPMENT.
11. PROVIDE RACEWAY, CONDUIT, AND WIRING FOR SECURITY DEVICES INDICATED. PROVIDE CONCEALED 3/4" C TYPICAL FOR LINES SHOWN TO SECURITY DEVICES. COORDINATE ALL JUNCTION BOX ROUGH-IN LOCATIONS WITH THE OWNER AND ACCESS SYSTEM CONTROL SYSTEM SUPPLIER PRIOR TO ANY ROUGH- IN.
12. DIV. 8 AND DIV 28 CONTRACTORS SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO OUTLINE POWER REQUIREMENTS AND CABLING FOR ALL ELECTRONIC ACCESS CONTROL EQUIPMENT AND EXACT DEVICE LOCATIONS.
13. PROVIDE ONE 4SQ J-BOX AND COVER ON PROTECTED SIDE OF DOORWAY IN ACCESSIBLE CEILING SPACE OR IN ANOTHER ACCESSIBLE LOCATION. PROVIDE HANDY BOX IN DOOR JAM, AND MOUNT BEFORE GROUTED. DRILL A 1/8" PILOT HOLE FOR DEVICE MOUNTING.
14. ALL CABLING TO DEVICES THAT ARE INSTALLED ON DOOR FRAMES OR MULLIONS SHALL BE ROUTED THROUGH THE INSIDE OF THE DOOR FRAME & MULLIONS. COORDINATE INSTALLATION WITH THE DOOR/WINDOW CONTCTOR PRIOR TO ANY ROUGH-IN.
15. ELECTRONIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, CRASH BARS, ETC.) SHALL BE PROVIDED BY DIV. 8. REVIEW THE DOOR HARDWARE SCHEDULE TO VERIFY THE OPERATIONAL FUNCTIONALITY AND THE LOCK VOLTAGES WILL WORK FOR EACH DOOR.
16. POWER SUPPLIES FOR ELECTRIFIED LOCKS AND ACCESS CONTROL DEVICES SHALL BE PROVIDED BY THE DIV. 28 CONTRACTOR. COORDINATE WITH THE DIV.8 CONTRACTOR FOR EXACT POWER REQUIREMENTS.
17. ALL ACCESS CONTROL SYSTEM CABLING SHALL BE RAN BACK TO THE ASSOCIATED HEAD-END AND/OR SLAVE PANELS AND POWER SUPPLIES THAT ARE CENTRALLY LOCATED IN EF/ER/TR(MDF/IDF) ROOMS. ALTERNATE CONFIGURATIONS MAY BE ACCEPTABLE PROVIDED THAT THE CONTRACTOR SUBMITS A WRITTEN APPROVAL AND ALLOWS FOR ANY INCREASES FOR WIRING & EQUIPMENT AND SUBMITS PLAN DRAWINGS THAT SHOW THE NEW CONFIGURATION.
18. HEAD-END ACCESS CONTROL PANELS AND SUFFICIENT CONTROLLER BOARDS TO SERVICE THE NUMBER OF ACCESS DOORS SHOWN SHALL BE MOUNTED ON 4X8 FIRE RATED PLYWOOD BACKER.
19. THE ACCESS CONTROL SYSTEM SHALL INCLUDE RELAYS, EXTERNAL POWER SUPPLIES, AUXILIARY DEVICES OR INPUT/OUTPUT MODULES THAT ARE REQUIRED TO SUPPORT THE DOOR TYPES THAT ARE INDICATED FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL CARD READER AND DOOR CONTROL SYSTEM. THE REQUEST TO EXITS, DOOR CONTACTS, AND INDICATOR CIRCUITS SHALL BE SUPERVISED FOR OPEN CIRCUIT OR SHORT CIRCUIT FAULTS BETWEEN THE DEVICE CONTACTS AND THE ACCESS CONTROLLER.
20. ALL SECURITY CAMERAS SHOWN SHALL HAVE ONE CAT6A CABLE INSTALLED BY THE LOW VOLTAGE CONTRACTOR, WITH 10'-0" SERVICE LOOPS AT EACH CAMERA LOCATION AND BACK WHERE IT WILL BE TERMINATED IN THE EF/ER/TR(MDF/IDF) ROOMS, SO EQUIPMENT CAN BE MOVE OR RELOCATED IF REQUIRED.
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22. THE SECURITY CONTRACTORS SHALL INSTALL ALL EQUIPMENT USING INDUSTRIES BEST STANDARDS & PRACTICES.
23. ALL EXTERIOR DOORS, GARAGE DOORS, ROOF HATCHS OR ACCESS DOORS, EF/ER/TR (MDF/IDF) ROOM DOORS, RISER ROOMS, AND ANY DOOR EQUIPPED WITH A CREDENTIAL CARD READER, MUST HAVE A SEPARATE DOOR CONTACT FOR THE ACCESS CONTROL SYSTEM AND THE INTRUSION DETECTION SYSTEM.
24. SECURITY INTEGRATOR SHALL COORDINATE ALL DOOR HARDWARE WITH THE DIV.8 CONTRACTOR FOR LOCK TYPES, POWER SUPPLIES, AND ANY MISCELLANEOUS EQUIPMENT NECESSARY. CAREFULLY REVIEW DOOR HARDWARE SUBMITTAL AND SUMMARIZE DISCREPANCIES TO TEAM ASAP.
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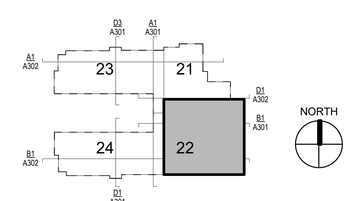
30. CONTRACTOR SHALL VERIFY ALL CAMERA LOCATIONS, HEIGHTS, ORIENTATIONS, AND VIEWS WITH THE SCHOOL DISTRICT PRIOR TO STARTING ANY WORK TO ENSURE IDEAL VIEWS FOR EACH CAMERA.

SHEET KEYNOTES

Y9	PROVIDE BEAM DETECTORS AS SHOWN ON PLANS. COORDINATE AND POSITION THEM ON AVAILABLE WALL SPACE WITH A CLEAR LINE OF SIGHT FOR OPTIMAL FUNCTIONALITY.
Y10	PROVIDE FIRE ALARM SYSTEM DUCT DETECTOR(S) AS REQUIRED. COORDINATE WITH DIVISION 23 CONTRACTOR FOR THE QUANTITY AND FOR MOUNTING IN MECHANICAL UNIT DUCT WORK.
Y12	SURVEILLANCE CAMERA LOCATIONS THAT ARE SHOWN ON PLANS ARE FOR ROUGH-IN ONLY (CONDUIT & CAT6 CABLING). OGDEN SCHOOL DISTRICT WILL BE PROVIDING ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT. SECURITY CONTRACTOR TO INSTALL ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT. AND OGDEN SCHOOL DISTRICT WILL BE PROGRAMING THE SURVEILLANCE CAMERAS AND EQUIPMENT.

KEY PLAN - UPPER LEVEL



LEVEL 02 - SYSTEMS FP - AREA 22
SCALE = 1/8" = 1'-0"

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - SYSTEMS PLAN - AREA 22

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LIGHTING SHEET NOTES

1. DEVICE HEIGHTS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL ROUGH-IN ELEVATION HEIGHTS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUGH-IN DEVICES 6" ABOVE DESKTOPS,COUNTERS, ETC.
2. REFFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. FOR AREAS WITHOUT CEILINGS, FIXTURE LOCATIONS ARE DIAGRAMMATIC. THE INTENT IS TO ALIGN, CENTER, OR SPACE FIXTURES BETWEEN ARCHITECTURAL AND STRUCTURAL ELEMENTS.. CONTRACTOR TO PAINT EXPOSED RACEWAY TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY EXACT FIXTURE LENGTHS FOR CONTINUOUS ILLUMINATION FOR COVES AND LINEAR RUNS. PROVIDE CONTINUOUS ILLUMINATION WITH NO MORE THAN A 1" GAP BETWEEN THE END OF THE EDGE OF THE WALL / CEILING AND THE FIXTURE
4. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR PLACEMENT OF FIXTURES WITHIN MECHANICAL ROOMS.
5. ALL ROOM CONTROLLERS AND/OR POWER PACKS SHALL BE INSTALLED IN THE CEILING SPACE DIRECTLY ABOVE THE ENTRY DOOR TO THE SPACE IT IS CONTROLLING.
6. SEE CORRESPONDING LIGHTING DIAGRAMS FOR GENERAL INSTALLATION.
7. REQUIREMENTS, CONNECTIONS, AND CABLE TYPES.
8. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO ALL EMERGENCY POWER CONTROL DEVICES FOR PROPER POWER SENSING.
9. PROVIDE UNSWITCHED HOT AHEAD OF RELAY, OCCUPENCY SENSOR, OR SWITCH TO ALL EXIT SIGNS.
10. IF SHOWN, SUBSCRIPT NEAR LIGHT FIXTURES INDICATES CONTROL INTENT. PROVIDE LIGHTING CONTROLLERS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS NEEDED
11. PROVIDE 0-10V DIMMING FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE WALLSTATION CONTROL SEQUENCE AND OR BY TYPE OF CONTROL INTERFACE SHOWN.
12. ALL 277V LIGHTING CIRCUITS TERMINATING AT LIGHTING CONTROL PANELS SHALL HAVE A MINIMUM LENGTH OF 20 FEET BETWEEN LIGHTING CONTROL PANEL AND BRANCH LIGHTING PANEL.
13. CAREFULLY COORDINATE FIXTURE PLACEMENT WITHIN BAFFLED CEILINGS. PENDANT MOUNTING FIXTURE SHALL BE MOUNTED AT THE SAME ELEVATION AS BAFFLES. COORDINATE WITH ARCHITECTURAL RCP AND DETAILS PRIOR TO ROUGH-IN.
14. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
15. ALL UNDERCABINET LIGHTS MUST BE COORDINATED WITH MILLWORK FOR EXACT LENGTHS. COORDINATE WITH MILLWORK SHOP DRAWINGS.
16. PROVIDE 0-10V DIMMER CONDUCTORS FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE RELAY PANEL SCHEDULE, WALL STATION CONTROL SEQUENCE,, OR REQUIRED BY IECC 2021.
17. SUBSCRIPT ADJACENT TO LIGHT FIXTURE INDICATES INTENDED CONTROL GROUPING. PROVIDE LIGHTING CONTROLS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS. PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS REQUIRED.
18. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURE'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

SHEET KEYNOTES

L3 PROVIDE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN. LOCATE OCCUPANCY SENSOR(S) PER MANUFACTURER'S PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS. PROVIDE ADDITIONAL SENSORS IF REQUIRED TO PROPERLY COVER THE RESPECTIVE ROOM.

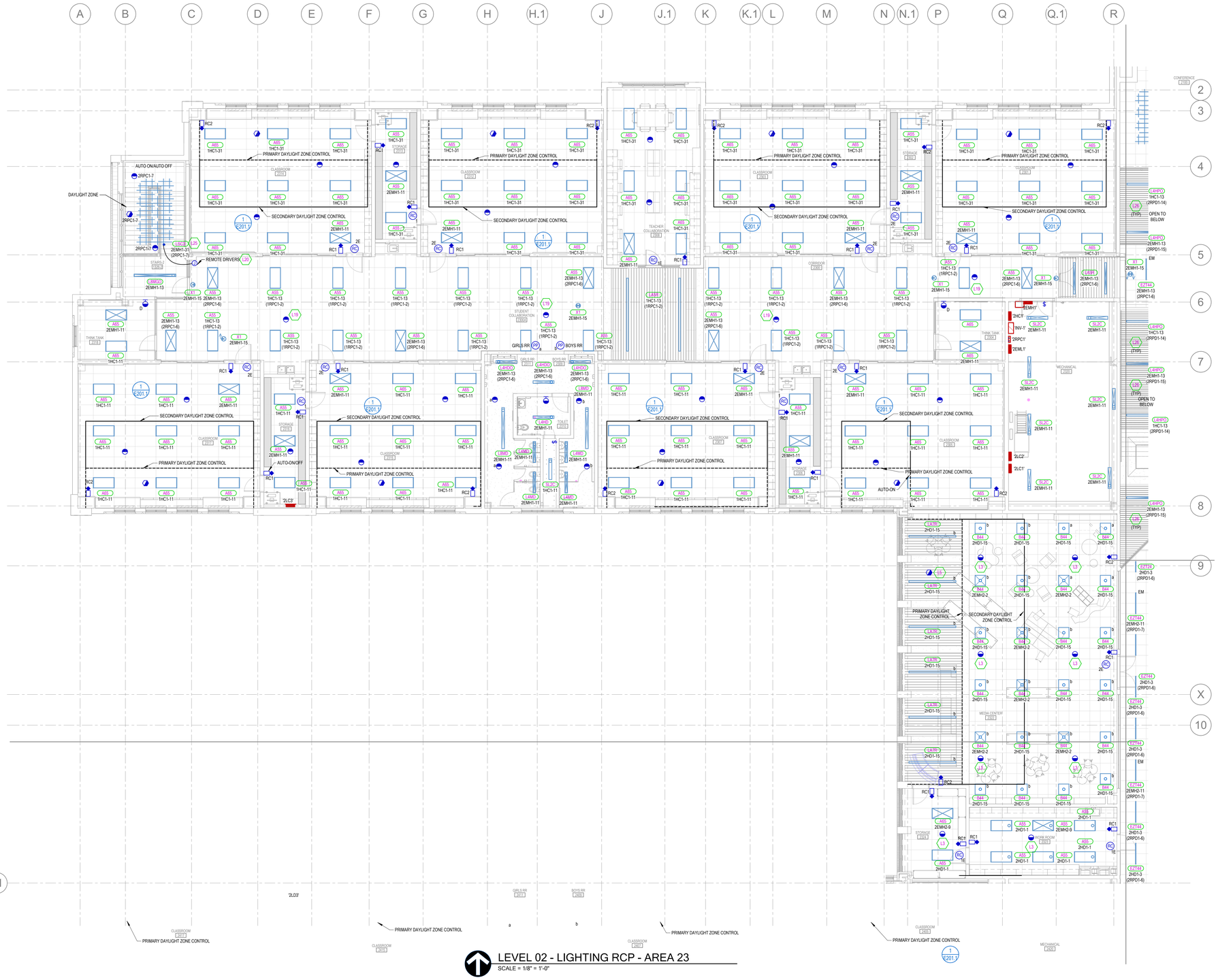
L5 PROVIDE DAYLIGHT ZONE CONTROL REQUIREMENTS PER IECC-2021 C405.2.3.3. LOCATE DAYLIGHT SENSOR(S) PER MANUFACTURER'S RECOMMENDATION AND WHERE REQUIRED WITHIN THE SPACE FOR PROPER COVERAGE. CONTROL LIGHT FIXTURES WITHIN THE DAYLIGHT ZONE WITH DAYLIGHT SENSOR (PHOTODIODE) AND WIRE THE FIXTURES 0-10V DRIVERS ACCORDINGLY. PROVIDE LLC OR PROVIDE ALL ADDITIONAL INFRASTRUCTURE TO MEET NEW IECC 2021 REQUIREMENTS WITH DAYLIGHT ZONES AND CONTROL ZONES SHOWN.

L19 PROVIDE EXTENDED RANGE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN THROUGHOUT CORRIDORS. PROVIDE 0-10V DIMMING ON ALL CORRIDOR LIGHTING RELAYS. OCCUPANCY SENSOR SHALL DIM CORRIDOR RELAY TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. LOCATE OCCUPANCY SENSOR SENSOR(S) PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.

L20 PROVIDE AND LOCATE REMOTE DRIVERS FOR LIGHT FIXTURE WITHIN CABINET ABOVE ACCESSIBLE LAY-IN CEILING GRID. PROVIDE NECESSARY LV CABLING BETWEEN REMOTE DRIVER AND FIXTURES. ACCOUNT FOR VOLTAGE DROP AS REQUIRED.

L25 PROVIDE HIGH CEILING OCCUPANCY AND DAYLIGHT SENSORS TO CONTROL STAIRWELL LIGHT(S). PROVIDE 0-10V DIMMING FOR LIGHTING RELAY. OCCUPANCY SENSOR SHALL DIM VESTIBULE TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. DAYLIGHT HARVESTING SHALL BE ACTIVATE AT ALL TIMES.

L26 PROVIDE FIXTURES WITH BUILT IN HIGH-CEILING OCCUPANCY AND DAYLIGHT SENSORS TO CONTROL LIGHTS THROUGHOUT THE MAIN 2-STORY CORRIDOR. OCCUPANCY SENSOR SHALL DIM LIGHTS TO 50% OUTPUT AFTER 30 MINUTES OF INACTIVITY. DAYLIGHT HARVESTING SHALL BE ACTIVATE AT ALL TIMES.



POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.

SHEET KEYNOTES

P3 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR VAV CONTROL TRANSFORMER. CONTROLS CONTRACTOR TO MAKE CONNECTION TO CONTROL TRANSFORMER AND VAV BOXES. COORDINATE EXACT LOCATION OF JUNCTION BOXES WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.

P4 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE/SMOKE DAMPERS. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.

P5 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE SEPARATION AREAS AND DOOR HOLD OPENS. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLY, HOLD OPENS, KEY SWITCHES, ACCESS CONTROL, AND FIRE ALARM SYSTEM. COORDINATE WITH DOOR HARDWARE SUPPLIER AND FIRE ALARM CONTRACTOR FOR ADDITIONAL INFORMATION.

P27 WINDOW SHADE SWITCH(S) (WALL) AND CONTROLLER(S) LOCATION (ABOVE CEILING). PROVIDE POWER TO CONTROLLERS AND ALL CONDUIT, WIRE, ETC. REQUIRED FROM CONTROLLERS TO SHADE MOTORS. SHADING COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENTS WITH SHADE SHOP DRAWINGS AND SHADE INSTALLER PRIOR TO ROUGH-IN.

P28 PROVIDE JUNCTION BOX ABOVE WINDOW FOR SHADE MOTOR(S). COORDINATE LOCATION OF JUNCTION BOX WITH SHOP DRAWINGS AND ARCHITECT SO THAT ALL ELECTRICAL CONNECTIONS ARE CONCEALED BY SHADE HEADER. PROVIDE CONDUIT AND ALL WIRE, TERMINATIONS ETC. TO SHADE CONTROLLER(S). GROUP MOTORS TOGETHER AS INDICATED e.g. 'a', 'b', 'c', 'd'.

P31 SPLIT AC SYSTEM. PROVIDE 3/4" CONDUIT AND REQUIRED UNIT WIRING BETWEEN OUTDOOR AND INDOOR UNIT. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL CONDUIT AND WIRING. COORDINATE LOCATION TERMINATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

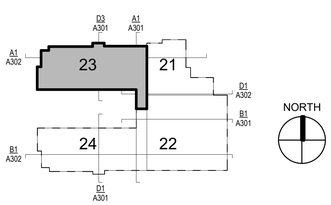
P34 PROVIDE DISPLAY BOX AND ASSOCIATED ELECTRICAL ROUGH-IN AS SHOWN. COORDINATE DISPLAY BOX LOCATION AND HEIGHT WITH OWNER PROVIDED MOUNT AND INTERACTIVE DISPLAY PRIOR TO ANY ROUGH-IN. BOX SHALL BE MOUNTED BETWEEN PLYWOOD DISPLAY BACKING. SEE TA SERIES OF DRAWINGS FOR ADDITIONAL REQUIREMENTS.

P35 PROVIDE FLOOR BOX/POKE THROUGH BOXES AS SHOWN. VERIFY LOCATION WITH ARCHITECT, FURNITURE, AND OWNER PRIOR ROUGH-IN.

LEVEL 02 - POWER FP - AREA 23

SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - POWER PLAN - AREA 23

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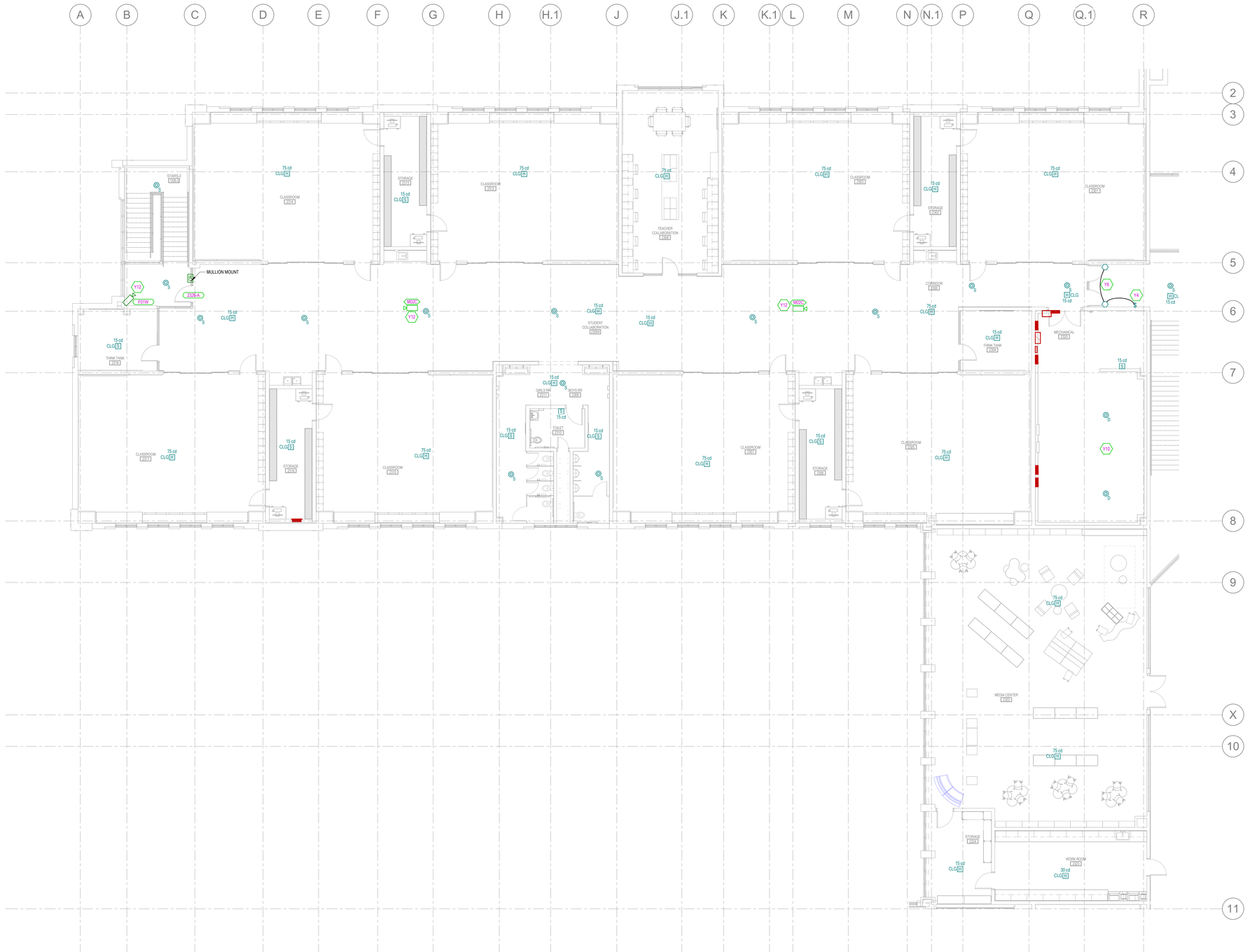

LEVEL 02 - SYSTEMS FP - AREA 23

SCALE = 1/8" = 1'-0"

SYSTEMS GENERAL NOTES

1. FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY AND BASED UPON A PERFORMANCE SPECIFICATION. ALL NEW EQUIPMENT/DEVICE QUANTITIES, LOCATION, AND ALL NATIONAL & LOCAL CODE COMPLIANCE TO BE PROVIDED AND STAMPED BY A LICENSED FIRE ALARM ENGINEER AND INCLUDED IN THE FIRE ALARM CONTRACTORS BID. IN NO WAY ARE THE DEVICES SHOWN ON THESE DRAWINGS TO BE IMPLEMENTED AS FINAL DESIGN DOCUMENTS
2. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, PRECAST CONCRETE, MASONRY AND GYP WALLS.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT QUANTITY AND LOCATIONS OF ALL FIRE SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES WITH FIRE SPRINKLER DRAWINGS. CONNECT ALL TAMPER AND FLOW SWITCHES TO FIRE ALARM SYSTEM.
4. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND QUANTITY OF ALL DUCT TYPE SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. HARD WIRE TO RELAY STARTER.
5. REGARDLESS OF WHAT IS SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATIONS FOR MAGNETIC DOOR HOLDER AND OPERATION REQUIREMENTS. ALL VISUAL DEVICES SHALL BE SYNCHRONIZED WITHIN THE BUILDING REGARDLESS OF PROJECT SCOPE BOUNDARIES.
6. PROVIDE FIRE ALARM RELAY MODULES FOR ALL DOORS WITH ACCESS CONTROL DEVICES.
7. PROVIDE (2) DUCT TYPE SMOKE DETECTOR FOR EACH FAN COIL UNIT, AHU, SUPPLY FAN AND HEAT PUMP OF 2000 CFM OR GREATER.
8. PROVIDE 120V CIRCUIT FROM THE NEAREST EQUIPMENT BRANCH PANELBOARD FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER. REFER TO DIAGRAM D012.
9. COORDINATE EXACT LOCATIONS OF CREDENTIAL CARD READERS AND ADA CONTROLS STATIONS WITH ARCHITECTURAL & SYSTEM DRAWINGS PRIOR TO ROUGH-IN. PROVIDE ALL CREDENTIAL CARD READER LOCATIONS AS REQUIRED PER ENTIRE CONSTRUCTION DOCUMENTS.
10. COORDINATE CLOSELY WITH THE DIV.8 COMMERCIAL DOOR AND HARDWARE CONTRACTOR TO ASSURE PROPER PLACEMENT OF ELECTRIFIED DOOR HARDWARE EQUIPMENT.
11. PROVIDE RACEWAY, CONDUIT, AND WIRING FOR SECURITY DEVICES INDICATED. PROVIDE CONCEALED 3/4" C TYPICAL FOR LINES SHOWN TO SECURITY DEVICES. COORDINATE ALL JUNCTION BOX ROUGH-IN LOCATIONS WITH THE OWNER AND ACCESS SYSTEM CONTROL SYSTEM SUPPLIER PRIOR TO ANY ROUGH- IN.
12. DIV. 8 AND DIV 28 CONTRACTORS SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO OUTLINE POWER REQUIREMENTS AND CABLING FOR ALL ELECTRONIC ACCESS CONTROL EQUIPMENT AND EXACT DEVICE LOCATIONS.
13. PROVIDE ONE 4SQ J-BOX AND COVER ON PROTECTED SIDE OF DOORWAY IN ACCESSIBLE CEILING SPACE OR IN ANOTHER ACCESSIBLE LOCATION. PROVIDE HANDY BOX IN DOOR JAM, AND MOUNT BEFORE GROUTED. DRILL A 1/8" PILOT HOLE FOR DEVICE MOUNTING.
14. ALL CABLING TO DEVICES THAT ARE INSTALLED ON DOOR FRAMES OR MULLIONS SHALL BE ROUTED THROUGH THE INSIDE OF THE DOOR FRAME & MULLIONS. COORDINATE INSTALLATION WITH THE DOOR/WINDOW CONTRACTOR PRIOR TO ANY ROUGH-IN.
15. ELECTRONIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, CRASH BARS, ETC.) SHALL BE PROVIDED BY DIV. 8. REVIEW THE DOOR HARDWARE SCHEDULE TO VERIFY THE OPERATIONAL FUNCTIONALITY AND THE LOCK VOLTAGES WILL WORK FOR EACH DOOR.
16. POWER SUPPLIES FOR ELECTRIFIED LOCKS AND ACCESS CONTROL DEVICES SHALL BE PROVIDED BY THE DIV. 28 CONTRACTOR. COORDINATE WITH THE DIV.8 CONTRACTOR FOR EXACT POWER REQUIREMENTS.
17. ALL ACCESS CONTROL SYSTEM CABLING SHALL BE RAN BACK TO THE ASSOCIATED HEAD-END AND/OR SLAVE PANELS AND POWER SUPPLIES THAT ARE CENTRALLY LOCATED IN EF/ER/TR(MDF/IDF) ROOMS. ALTERNATE CONFIGURATIONS MAY BE ACCEPTABLE PROVIDED THAT THE CONTRACTOR SUBMITS A WRITTEN APPROVAL AND ALLOWS FOR ANY INCREASES FOR WIRING & EQUIPMENT AND SUBMITS PLAN DRAWINGS THAT SHOW THE NEW CONFIGURATION.
18. HEAD-END ACCESS CONTROL PANELS AND SUFFICIENT CONTROLLER BOARDS TO SERVICE THE NUMBER OF ACCESS DOORS SHOWN SHALL BE MOUNTED ON 4X8 FIRE RATED PLYWOOD BACKER.
19. THE ACCESS CONTROL SYSTEM SHALL INCLUDE RELAYS, EXTERNAL POWER SUPPLIES, AUXILIARY DEVICES OR INPUT/OUTPUT MODULES THAT ARE REQUIRED TO SUPPORT THE DOOR TYPES THAT ARE INDICATED FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL CARD READER AND DOOR CONTROL SYSTEM. THE REQUEST TO EXITS, DOOR CONTACTS, AND INDICATOR CIRCUITS SHALL BE SUPERVISED FOR OPEN CIRCUIT OR SHORT CIRCUIT FAULTS BETWEEN THE DEVICE CONTACTS AND THE ACCESS CONTROLLER.
20. ALL SECURITY CAMERAS SHOWN SHALL HAVE ONE CAT6A CABLE INSTALLED BY THE LOW VOLTAGE CONTRACTOR, WITH 10'-0" SERVICE LOOPS AT EACH CAMERA LOCATION AND BACK WHERE IT WILL BE TERMINATED IN THE EF/ER/TR(MDF/IDF) ROOMS, SO EQUIPMENT CAN BE MOVE OR RELOCATED IF REQUIRED.
21. THE SECURITY CONTRACTORS SHALL FOLLOW ALL OF THE MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS, & INSTRUCTIONS, AND THE OWNER'S REQUIREMENTS AND INSTRUCTIONS.
22. THE SECURITY CONTRACTORS SHALL INSTALL ALL EQUIPMENT USING INDUSTRIES BEST STANDARDS & PRACTICES.
23. ALL EXTERIOR DOORS, GARAGE DOORS, ROOF HATCHS OR ACCESS DOORS, EF/ER/TR (MDF/IDF) ROOM DOORS, RISER ROOMS, AND ANY DOOR EQUIPPED WITH A CREDENTIAL CARD READER, MUST HAVE A SEPARATE DOOR CONTACT FOR THE ACCESS CONTROL SYSTEM AND THE INTRUSION DETECTION SYSTEM.
24. SECURITY INTEGRATOR SHALL COORDINATE ALL DOOR HARDWARE WITH THE DIV.8 CONTRACTOR FOR LOCK TYPES, POWER SUPPLIES, AND ANY MISCELLANEOUS EQUIPMENT NECESSARY. CAREFULLY REVIEW DOOR HARDWARE SUBMITTAL AND SUMMARIZE DISCREPANCIES TO TEAM ASAP.
25. EQUIPMENT COUNTS ARE PROVIDED FOR INFORMATION ONLY AT A CONVENIENCE TO THE CONTRACTOR. IT STILL REMAINS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DRAWING QUANTITIES. IF A DISCREPANCY ARISES BETWEEN THE SCHEDULE COUNTS AND THE DRAWING COUNTS, THE HIGHEST QUANTITY SHALL BE INCLUDED IN THE BID. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE ALL SPECIFIED AND NON-SPECIFIED COMPONENTS NEEDED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.
26. PROVIDE FIRE ALARM INTERFACE WITH THE ACCESS CONTROL SYSTEM SO TO UNLOCK ALL INDICATED LOCKS UPON ANY FIRE ALARM INITIATION.
27. REFER TO THE SPECIFICATIONS FOR THE INTEGRATION & TIE-IN REQUIREMENTS BETWEEN SYSTEMS (VIDEO SURVEILLANCE SYSTEMS, ACCESS CONTROL SYSTEMS, INTRUSION DETECTION SYSTEMS, AND FIRE ALARM SYSTEMS, ETC.)
28. SECURITY INTEGRATOR SHALL CAREFULLY REVIEW THE REFLECTED CEILING PLANS, ARCHITECTURAL ELEVATIONS, AND MILLWORK DRAWINGS FOR ALL DEVICE & COMPONENT INSTALLATION PRIOR TO INSTALLING ANY EQUIPMENT.
29. ALL CAMERAS AND CAMERA MOUNTING HARDWARE ARE GOING TO BE OWNER FURNISHED, AND CONTRACTOR INSTALLED. CONTRACTOR SHALL PAINT MOUNTING HARDWARE AND CAMERAS TO MATCH THE BUILDING MOUNTING SURFACE COLOR. COORDINATE COLORS WITH ARCHITECT PRIOR TO PREP AND PAINTING.
30. CONTRACTOR SHALL VERIFY ALL CAMERA LOCATIONS, HEIGHTS, ORIENTATIONS, AND VIEWS WITH THE SCHOOL DISTRICT PRIOR TO STARTING ANY WORK TO ENSURE IDEAL VIEWS FOR EACH CAMERA.

SHEET KEYNOTES

Y4	DOOR HOLDERS AND KEYED SWITCH SUPPLIED BY DOOR HARDWARE SUPPLIER AND INSTALLED BY DIVISION 26. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLIES(IF REQUIRED), HOLD OPENS, KEYED SWITCH(ES), ACCESS CONTROL, FIRE ALARM CONTROL AND 24VDC POWER CIRCUIT. COORDINATE DOOR HOLDERS LOCATION WITH DOOR HARDWARE SCHEDULES. FIRE ALARM CONTROL MODULE SHALL RELEASE DOORS UPON ACTIVATION OF AN ALARM OR LOCKDOWN.
Y6	DOOR HOLDERS LOCATIONS. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLIES(IF REQUIRED), HOLD OPENS, ACCESS CONTROL, FIRE ALARM CONTROL AND 24VDC POWER CIRCUIT. COORDINATE DOOR HOLDERS LOCATION WITH DOOR HARDWARE SCHEDULES. FIRE ALARM CONTROL MODULE SHALL RELEASE DOORS UPON ACTIVATION OF AN ALARM OR LOCKDOWN.
Y10	PROVIDE FIRE ALARM SYSTEM DUCT DETECTOR(S) AS REQUIRED. COORDINATE WITH DIVISION 23 CONTRACTOR FOR THE QUANTITY AND FOR MOUNTING IN MECHANICAL UNIT DUCT WORK.
Y12	SURVEILLANCE CAMERA LOCATIONS THAT ARE SHOWN ON PLANS ARE FOR ROUGH-IN ONLY (CONDUIT & CAT6 CABLING). OGDEN SCHOOL DISTRICT WILL BE PROVIDING ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT. SECURITY CONTRACTOR TO INSTALL ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT, AND OGDEN SCHOOL DISTRICT WILL BE PROGRAMING THE SURVEILLANCE CAMERAS AND EQUIPMENT.

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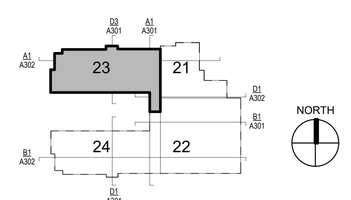

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11/8/2023 6:59:34 PM

LIGHTING SHEET NOTES

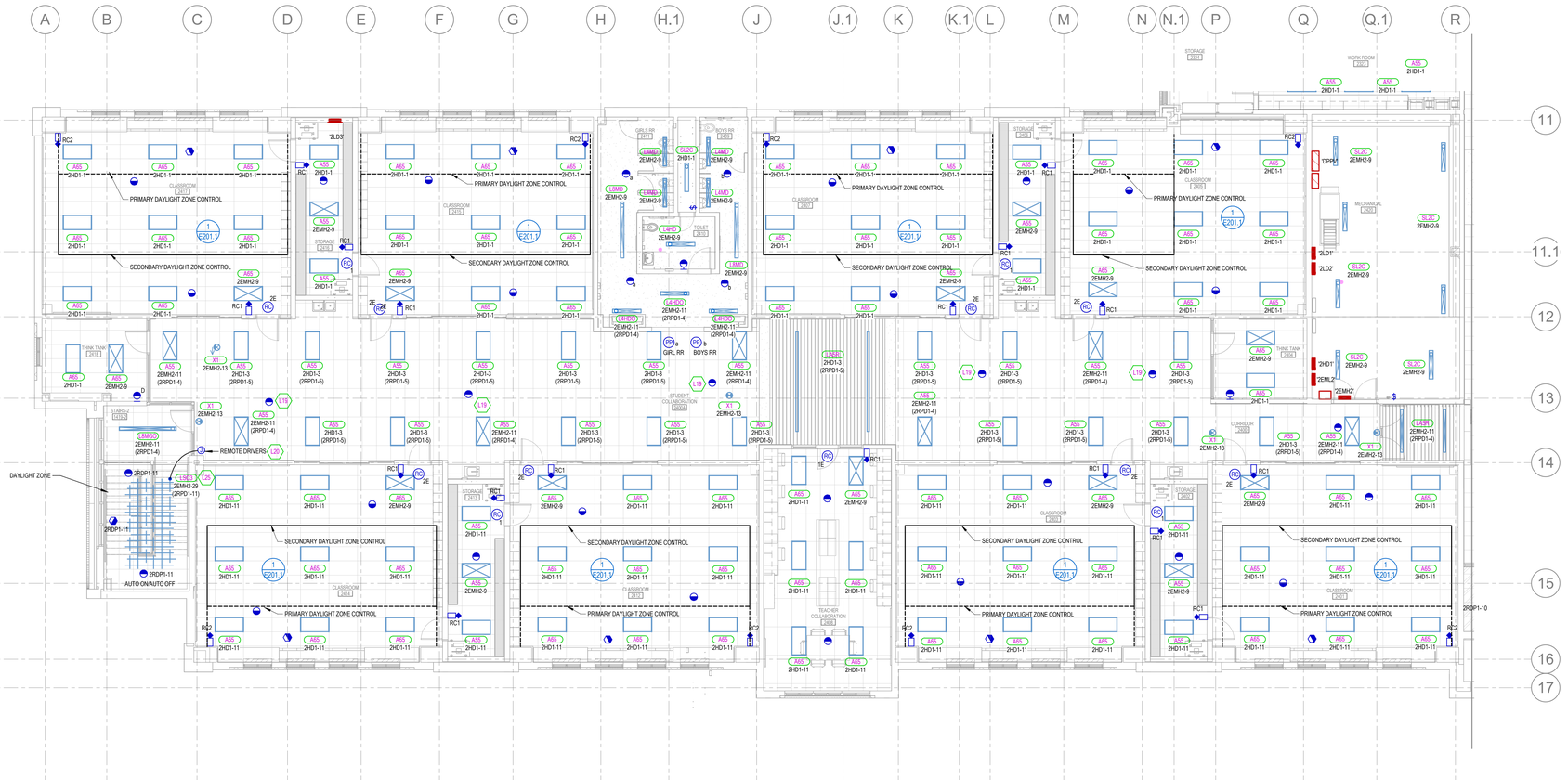
1. DEVICE HEIGHTS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL ROUGH-IN ELEVATION HEIGHTS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUGH-IN DEVICES 6" ABOVE DESKTOPS,COUNTERS, ETC.
2. REFFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. FOR AREAS WITHOUT CEILINGS, FIXTURE LOCATIONS ARE DIAGRAMMATIC. THE INTENT IS TO ALIGN, CENTER, OR SPACE FIXTURES BETWEEN ARCHITECTURAL AND STRUCTURAL ELEMENTS.. CONTRACTOR TO PAINT EXPOSED RACEWAY TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY EXACT FIXTURE LENGTHS FOR CONTINUOUS ILLUMINATION FOR COVES AND LINEAR RUNS. PROVIDE CONTINUOUS ILLUMINATION WITH NO MORE THAN A 1" GAP BETWEEN THE END OF THE EDGE OF THE WALL / CEILING AND THE FIXTURE
4. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR PLACEMENT OF FIXTURES WITHIN MECHANICAL ROOMS.
5. ALL ROOM CONTROLLERS AND/OR POWER PACKS SHALL BE INSTALLED IN THE CEILING SPACE DIRECTLY ABOVE THE ENTRY DOOR TO THE SPACE IT IS CONTROLLING.
6. SEE CORRESPONDING LIGHTING DIAGRAMS FOR GENERAL INSTALLATION.
7. REQUIREMENTS, CONNECTIONS, AND CABLE TYPES.
8. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO ALL EMERGENCY POWER CONTROL DEVICES FOR PROPER POWER SENSING.
9. PROVIDE UNSWITCHED HOT AHEAD OF RELAY, OCCUPENCY SENSOR, OR SWITCH TO ALL EXIT SIGNS.
10. IF SHOWN, SUBSCRIPT NEAR LIGHT FIXTURES INDICATES CONTROL INTENT. PROVIDE LIGHTING CONTROLLERS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS NEEDED
11. PROVIDE 0-10V DIMMING FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE WALLSTATION CONTROL SEQUENCE AND OR BY TYPE OF CONTROL INTERFACE SHOWN.
12. ALL 277V LIGHTING CIRCUITS TERMINATING AT LIGHTING CONTROL PANELS SHALL HAVE A MINIMUM LENGTH OF 20 FEET BETWEEN LIGHTING CONTROL PANEL AND BRANCH LIGHTING PANEL.
13. CAREFULLY COORDINATE FIXTURE PLACEMENT WITHIN BAFFLED CEILINGS. PENDANT MOUNTING FIXTURE SHALL BE MOUNTED AT THE SAME ELEVATION AS BAFFLES. COORDINATE WITH ARCHITECTURAL RCP AND DETAILS PRIOR TO ROUGH-IN.
14. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
15. ALL UNDERCABINET LIGHTS MUST BE COORDINATED WITH MILLWORK FOR EXACT LENGTHS. COORDINATE WITH MILLWORK SHOP DRAWINGS.
16. PROVIDE 0-10V DIMMER CONDUCTORS FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE RELAY PANEL SCHEDULE, WALL STATION CONTROL SEQUENCE., OR REQUIRED BY IECC 2021.
17. SUBSCRIPT ADJACENT TO LIGHT FIXTURE INDICATES INTENDED CONTROL GROUPING. PROVIDE LIGHTING CONTROLS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS. PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS REQUIRED.
18. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURE'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

SHEET KEYNOTES

L19 PROVIDE EXTENDED RANGE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN THROUGHOUT CORRIDORS. PROVIDE 0-10V DIMMING ON ALL CORRIDOR LIGHTING RELAYS. OCCUPANCY SENSOR SHALL DIM CORRIDOR RELAY TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. LOCATE OCCUPANCY SENSOR SENSOR(S) PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS.

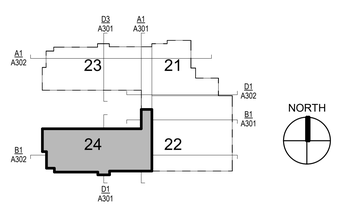
L20 PROVIDE AND LOCATE REMOTE DRIVERS FOR LIGHT FIXTURE WITHIN CABINET ABOVE ACCESSIBLE LAY-IN CEILING GRID. PROVIDE NECESSARY LV CABLING BETWEEN REMOTE DRIVER AND FIXTURES. ACCOUNT FOR VOLTAGE DROP AS REQUIRED.

L25 PROVIDE HIGH CEILING OCCUPANCY AND DAYLIGHT SENSORS TO CONTROL STAIRWELL LIGHT(S). PROVIDE 0-10V DIMMING FOR LIGHTING RELAY. OCCUPANCY SENSOR SHALL DIM VESTIBULE TO 50% OUTPUT AFTER 15 MINUTES OF INACTIVITY. DAYLIGHT HARVESTING SHALL BE ACTIVATE AT ALL TIMES.



LEVEL 02 - LIGHTING RCP - AREA 24
SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - LIGHTING PLAN - AREA 24

E124.1

11/6/2023 6:59:38 PM

POWER GENERAL SHEET NOTES

1. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS, ATHLETIC SAFETY WALL PADDING AND CABINETRY DRAWINGS.
2. ALL THE LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, SOUND AMPLIFICATION, ETC. TO BE ROUTED THROUGH CONDUIT IN EXPOSED AND CLOUDED CEILING AREAS.
3. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
4. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
5. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL UNITS WITH MECHANICAL CONTRACTOR. CIRCUITS TO ALL MECHANICAL EQUIPMENT SHALL BE DEDICATED UNLESS NOTED OTHERWISE.
7. FOR VAV POWER, PROVIDE A DEDICATED 120V/20A CIRCUIT FROM A PANEL LOCATED IN THE ELECTRICAL ROOM OF THE ASSOCIATED QUADRANT. COORDINATE EXACT LOCATION OF ALL VAV BOXES WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
8. PROVIDE 120V CIRCUIT FROM NEAREST PROVIDED CIRCUIT FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5 FEET OF EACH FIRE/SMOKE DAMPER.
9. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.
10. DIVISION-26 IS RESPONSIBLE TO PROVIDE CONDUIT AND ROUGH-IN FOR ALL THERMOSTAT CONTROLS LOCATED WITHIN WALLS. COORDINATE WITH THE CONTROLS CONTRACTOR AND VERIFY EXACT LOCATION OF ALL THERMOSTATS.

SHEET KEYNOTES

P3 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR VAV CONTROL TRANSFORMER. CONTROLS CONTRACTOR TO MAKE CONNECTION TO CONTROL TRANSFORMER AND VAV BOXES. COORDINATE EXACT LOCATION OF JUNCTION BOXES WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.

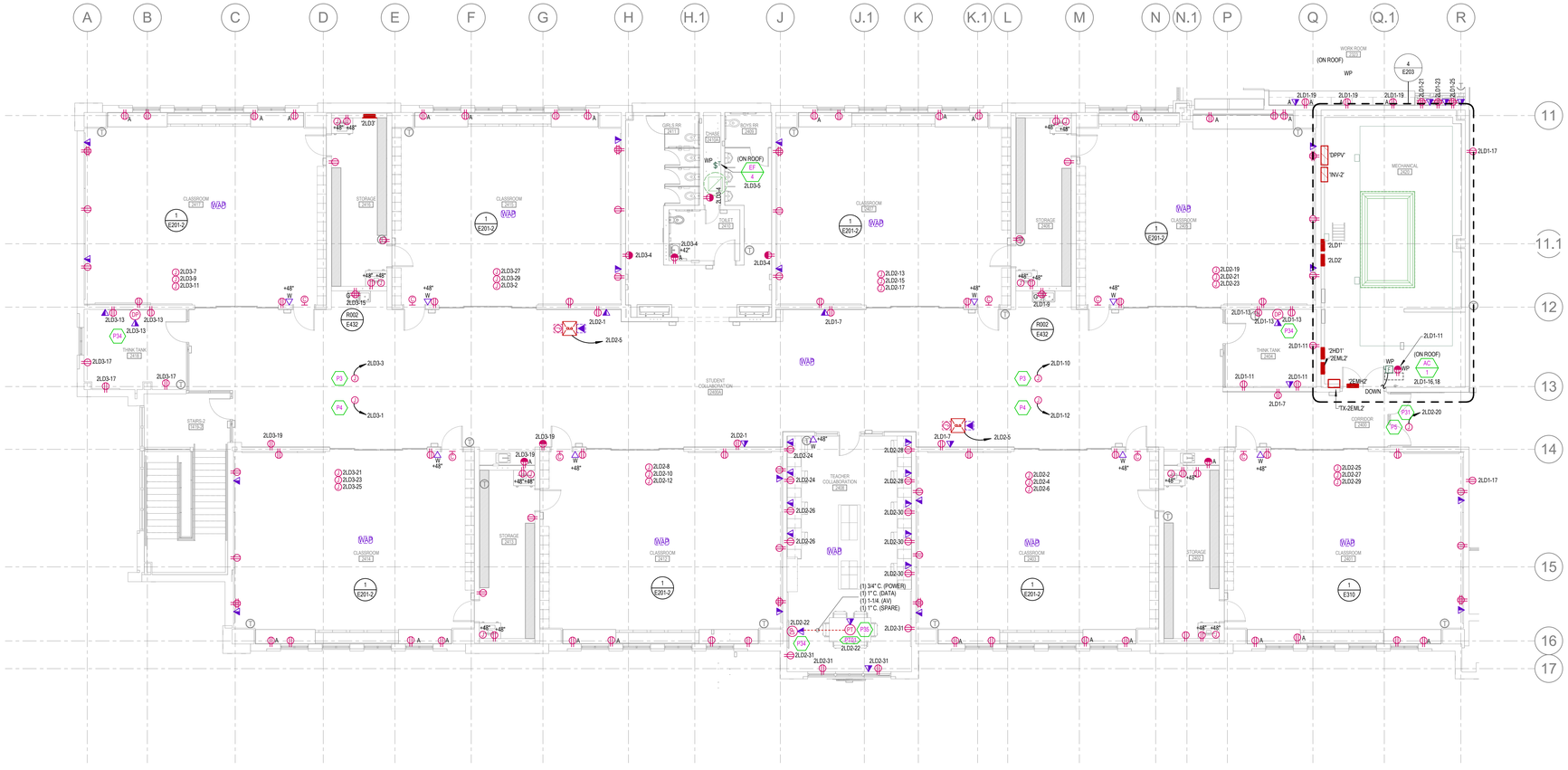
P4 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE/SMOKE DAMPERS. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.

P5 PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE SEPARATION AREAS AND DOOR HOLD OPENS. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLY, HOLD OPENS, KEY SWITCHES, ACCESS CONTROL, AND FIRE ALARM SYSTEM. COORDINATE WITH DOOR HARDWARE SUPPLIER AND FIRE ALARM CONTRACTOR FOR ADDITIONAL INFORMATION.

P31 SPLIT AC SYSTEM. PROVIDE 3/4" CONDUIT AND REQUIRED UNIT WIRING BETWEEN OUTDOOR AND INDOOR UNIT. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL CONDUIT AND WIRING. COORDINATE LOCATION TERMINATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

P34 PROVIDE DISPLAY BOX AND ASSOCIATED ELECTRICAL ROUGH-IN AS SHOWN. COORDINATE DISPLAY BOX LOCATION AND HEIGHT WITH OWNER PROVIDED MOUNT AND INTERACTIVE DISPLAY PRIOR TO ANY ROUGH-IN. BOX SHALL BE MOUNTED BETWEEN PLYWOOD DISPLAY BACKING. SEE TA SERIES OF DRAWINGS FOR ADDITIONAL REQUIREMENTS.

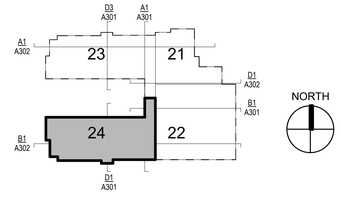
P35 PROVIDE FLOOR BOX/POKE THROUGH BOXES AS SHOWN. VERIFY LOCATION WITH ARCHITECT, FURNITURE, AND OWNER PRIOR ROUGH-IN.



LEVEL 02 - POWER FP - AREA 24

SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - POWER PLAN - AREA 24

E124.2

11/6/2023 8:59:41 PM

LEVEL 02 - SYSTEMS FP - AREA 24
SCALE = 1/8" = 1'-0"

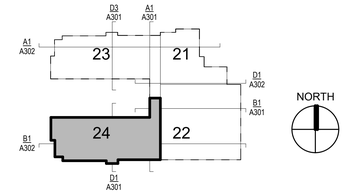
SYSTEMS GENERAL NOTES

1. FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY AND BASED UPON A PERFORMANCE SPECIFICATION. ALL NEW EQUIPMENT/DEVICE QUANTITIES, LOCATION, AND ALL NATIONAL & LOCAL CODE COMPLIANCE TO BE PROVIDED AND STAMPED BY A LICENSED FIRE ALARM ENGINEER AND INCLUDED IN THE FIRE ALARM CONTRACTORS BID. IN NO WAY ARE THE DEVICES SHOWN ON THESE DRAWINGS TO BE IMPLEMENTED AS FINAL DESIGN DOCUMENTS
2. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, PRECAST CONCRETE, MASONRY AND GYP WALLS.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT QUANTITY AND LOCATIONS OF ALL FIRE SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES WITH FIRE SPRINKLER DRAWINGS. CONNECT ALL TAMPER AND FLOW SWITCHES TO FIRE ALARM SYSTEM.
4. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND QUANTITY OF ALL DUCT TYPE SMOKE DETECTORS WITH MECHANICAL CONTRACTOR. HARD WIRE TO RELAY STARTER.
5. REGARDLESS OF WHAT IS SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATIONS FOR MAGNETIC DOOR HOLDER AND OPERATION REQUIREMENTS. ALL VISUAL DEVICES SHALL BE SYNCHRONIZED WITHIN THE BUILDING REGARDLESS OF PROJECT SCOPE BOUNDARIES.
6. PROVIDE FIRE ALARM RELAY MODULES FOR ALL DOORS WITH ACCESS CONTROL DEVICES.
7. PROVIDE (2) DUCT TYPE SMOKE DETECTOR FOR EACH FAN COIL UNIT, AHU, SUPPLY FAN AND HEAT PUMP OF 2000 CFM OR GREATER.
8. PROVIDE 120V CIRCUIT FROM THE NEAREST EQUIPMENT BRANCH PANELBOARD FOR FIRE/SMOKE DAMPER RELAYS. PROVIDE FIRE ALARM MODULES AND RELAYS AS NECESSARY FOR ALL FIRE/SMOKE DAMPERS SHOWN ON DIVISION 23 DRAWINGS. ALL FIRE/SMOKE DAMPERS SHALL HAVE A MANUAL OVERRIDE SWITCH. PROVIDE DUCT DETECTOR WITHIN 5'-0" OF EACH FIRE/SMOKE DAMPER. REFER TO DIAGRAM D012.
9. COORDINATE EXACT LOCATIONS OF CREDENTIAL CARD READERS AND ADA CONTROLS STATIONS WITH ARCHITECTURAL & SYSTEM DRAWINGS PRIOR TO ROUGH-IN. PROVIDE ALL CREDENTIAL CARD READER LOCATIONS AS REQUIRED PER ENTIRE CONSTRUCTION DOCUMENTS.
10. COORDINATE CLOSELY WITH THE DIV.8 COMMERCIAL DOOR AND HARDWARE CONTRACTOR TO ASSURE PROPER PLACEMENT OF ELECTRIFIED DOOR HARDWARE EQUIPMENT.
11. PROVIDE RACEWAY, CONDUIT, AND WIRING FOR SECURITY DEVICES INDICATED. PROVIDE CONCEALED 3/4" C TYPICAL FOR LINES SHOWN TO SECURITY DEVICES. COORDINATE ALL JUNCTION BOX ROUGH-IN LOCATIONS WITH THE OWNER AND ACCESS SYSTEM CONTROL SYSTEM SUPPLIER PRIOR TO ANY ROUGH- IN.
12. DIV. 8 AND DIV 28 CONTRACTORS SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR TO OUTLINE POWER REQUIREMENTS AND CABLING FOR ALL ELECTRONIC ACCESS CONTROL EQUIPMENT AND EXACT DEVICE LOCATIONS.
13. PROVIDE ONE 4SQ J-BOX AND COVER ON PROTECTED SIDE OF DOORWAY IN ACCESSIBLE CEILING SPACE OR IN ANOTHER ACCESSIBLE LOCATION. PROVIDE HANDY BOX IN DOOR JAM, AND MOUNT BEFORE GROUTED. DRILL A 1/8" PILOT HOLE FOR DEVICE MOUNTING.
14. ALL CABLING TO DEVICES THAT ARE INSTALLED ON DOOR FRAMES OR MULLIONS SHALL BE ROUTED THROUGH THE INSIDE OF THE DOOR FRAME & MULLIONS. COORDINATE INSTALLATION WITH THE DOOR/WINDOW CONTRACTOR PRIOR TO ANY ROUGH-IN.
15. ELECTRONIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, CRASH BARS, ETC.) SHALL BE PROVIDED BY DIV. 8. REVIEW THE DOOR HARDWARE SCHEDULE TO VERIFY THE OPERATIONAL FUNCTIONALITY AND THE LOCK VOLTAGES WILL WORK FOR EACH DOOR.
16. POWER SUPPLIES FOR ELECTRIFIED LOCKS AND ACCESS CONTROL DEVICES SHALL BE PROVIDED BY THE DIV. 28 CONTRACTOR. COORDINATE WITH THE DIV.8 CONTRACTOR FOR EXACT POWER REQUIREMENTS.
17. ALL ACCESS CONTROL SYSTEM CABLING SHALL BE RAN BACK TO THE ASSOCIATED HEAD-END AND/OR SLAVE PANELS AND POWER SUPPLIES THAT ARE CENTRALLY LOCATED IN EF/ER/TR(MDF/IDF) ROOMS. ALTERNATE CONFIGURATIONS MAY BE ACCEPTABLE PROVIDED THAT THE CONTRACTOR SUBMITS A WRITTEN APPROVAL AND ALLOWS FOR ANY INCREASES FOR WIRING & EQUIPMENT AND SUBMITS PLAN DRAWINGS THAT SHOW THE NEW CONFIGURATION.
18. HEAD-END ACCESS CONTROL PANELS AND SUFFICIENT CONTROLLER BOARDS TO SERVICE THE NUMBER OF ACCESS DOORS SHOWN SHALL BE MOUNTED ON 4X8 FIRE RATED PLYWOOD BACKER.
19. THE ACCESS CONTROL SYSTEM SHALL INCLUDE RELAYS, EXTERNAL POWER SUPPLIES, AUXILIARY DEVICES OR INPUT/OUTPUT MODULES THAT ARE REQUIRED TO SUPPORT THE DOOR TYPES THAT ARE INDICATED FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL CARD READER AND DOOR CONTROL SYSTEM. THE REQUEST TO EXITS, DOOR CONTACTS, AND INDICATOR CIRCUITS SHALL BE SUPERVISED FOR OPEN CIRCUIT OR SHORT CIRCUIT FAULTS BETWEEN THE DEVICE CONTACTS AND THE ACCESS CONTROLLER.
20. ALL SECURITY CAMERAS SHOWN SHALL HAVE ONE CAT6A CABLE INSTALLED BY THE LOW VOLTAGE CONTRACTOR, WITH 10'-0" SERVICE LOOPS AT EACH CAMERA LOCATION AND BACK WHERE IT WILL BE TERMINATED IN THE EF/ER/TR(MDF/IDF) ROOMS, SO EQUIPMENT CAN BE MOVE OR RELOCATED IF REQUIRED.
21. THE SECURITY CONTRACTORS SHALL FOLLOW ALL OF THE MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS, & INSTRUCTIONS, AND THE OWNER'S REQUIREMENTS AND INSTRUCTIONS.
22. THE SECURITY CONTRACTORS SHALL INSTALL ALL EQUIPMENT USING INDUSTRIES BEST STANDARDS & PRACTICES.
23. ALL EXTERIOR DOORS, GARAGE DOORS, ROOF HATCHS OR ACCESS DOORS, EF/ER/TR (MDF/IDF) ROOM DOORS, RISER ROOMS, AND ANY DOOR EQUIPPED WITH A CREDENTIAL CARD READER, MUST HAVE A SEPARATE DOOR CONTACT FOR THE ACCESS CONTROL SYSTEM AND THE INTRUSION DETECTION SYSTEM.
24. SECURITY INTEGRATOR SHALL COORDINATE ALL DOOR HARDWARE WITH THE DIV.8 CONTRACTOR FOR LOCK TYPES, POWER SUPPLIES, AND ANY MISCELLANEOUS EQUIPMENT NECESSARY. CAREFULLY REVIEW DOOR HARDWARE SUBMITTAL AND SUMMARIZE DISCREPANCIES TO TEAM ASAP.
25. EQUIPMENT COUNTS ARE PROVIDED FOR INFORMATION ONLY AT A CONVENIENCE TO THE CONTRACTOR. IT STILL REMAINS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DRAWING QUANTITIES. IF A DISCREPANCY ARISES BETWEEN THE SCHEDULE COUNTS AND THE DRAWING COUNTS, THE HIGHEST QUANTITY SHALL BE INCLUDED IN THE BID. IT IS THE CONTRACTOR RESPONSIBILITY TO PROVIDE ALL SPECIFIED AND NON-SPECIFIED COMPONENTS NEEDED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.
26. PROVIDE FIRE ALARM INTERFACE WITH THE ACCESS CONTROL SYSTEM SO TO UNLOCK ALL INDICATED LOCKS UPON ANY FIRE ALARM INITIATION.
27. REFER TO THE SPECIFICATIONS FOR THE INTEGRATION & TIE-IN REQUIREMENTS BETWEEN SYSTEMS (VIDEO SURVEILLANCE SYSTEMS, ACCESS CONTROL SYSTEMS, INTRUSION DETECTION SYSTEMS, AND FIRE ALARM SYSTEMS, ETC.)
28. SECURITY INTEGRATOR SHALL CAREFULLY REVIEW THE REFLECTED CEILING PLANS, ARCHITECTURAL ELEVATIONS, AND MILLWORK DRAWINGS FOR ALL DEVICE & COMPONENT INSTALLATION PRIOR TO INSTALLING ANY EQUIPMENT.
29. ALL CAMERAS AND CAMERA MOUNTING HARDWARE ARE GOING TO BE OWNER FURNISHED, AND CONTRACTOR INSTALLED. CONTRACTOR SHALL PAINT MOUNTING HARDWARE AND CAMERAS TO MATCH THE BUILDING MOUNTING SURFACE COLOR. COORDINATE COLORS WITH ARCHITECT PRIOR TO PREP AND PAINTING.
30. CONTRACTOR SHALL VERIFY ALL CAMERA LOCATIONS, HEIGHTS, ORIENTATIONS, AND VIEWS WITH THE SCHOOL DISTRICT PRIOR TO STARTING ANY WORK TO ENSURE IDEAL VIEWS FOR EACH CAMERA.

SHEET KEYNOTES

Y4	DOOR HOLDERS AND KEYED SWITCH SUPPLIED BY DOOR HARDWARE SUPPLIER AND INSTALLED BY DIVISION 26. WIRE COMPLETELY AND PROVIDE ALL INTERCONNECTING WIRING BETWEEN POWER SUPPLIES(IF REQUIRED), HOLD OPENS, KEYED SWITCH(ES), ACCESS CONTROL, FIRE ALARM CONTROL AND 24VDC POWER CIRCUIT. COORDINATE DOOR HOLDERS LOCATION WITH DOOR HARDWARE SCHEDULES. FIRE ALARM CONTROL MODULE SHALL RELEASE DOORS UPON ACTIVATION OF AN ALARM OR LOCKDOWN.
Y10	PROVIDE FIRE ALARM SYSTEM DUCT DETECTOR(S) AS REQUIRED. COORDINATE WITH DIVISION 23 CONTRACTOR FOR THE QUANTITY AND FOR MOUNTING IN MECHANICAL UNIT DUCT WORK.
Y12	SURVEILLANCE CAMERA LOCATIONS THAT ARE SHOWN ON PLANS ARE FOR ROUGH-IN ONLY (CONDUIT & CAT6 CABLING). OGDEN SCHOOL DISTRICT WILL BE PROVIDING ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT. SECURITY CONTRACTOR TO INSTALL ALL OF THE ACTIVE SURVEILLANCE EQUIPMENT, AND OGDEN SCHOOL DISTRICT WILL BE PROGRAMING THE SURVEILLANCE CAMERAS AND EQUIPMENT.

KEY PLAN - UPPER LEVEL



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SALT LAKE ST. GEORGE

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - SYSTEMS PLAN - AREA 24

E124.3

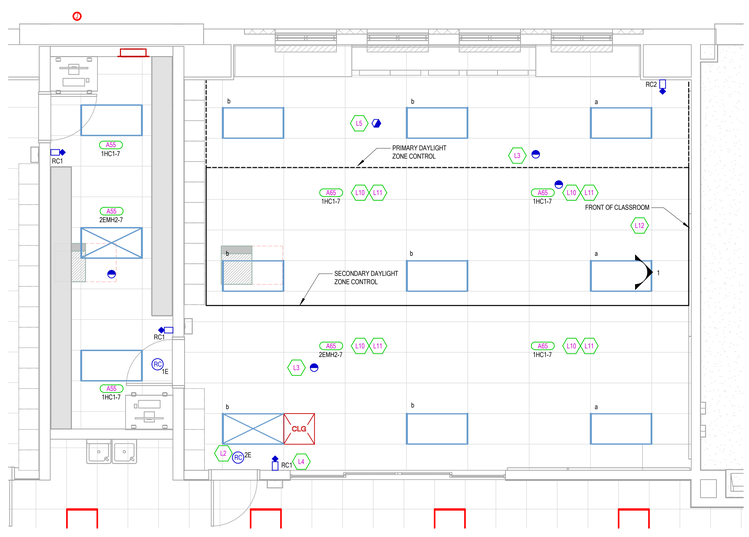
11/6/2023 8:59:44 PM

LIGHTING SHEET NOTES

1. DEVICE HEIGHTS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL ROUGH-IN ELEVATION HEIGHTS WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. ROUGH-IN DEVICES 6" ABOVE DESKTOPS, COUNTERS, ETC.
2. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FIXTURE LOCATIONS WITHIN A CEILING OR CEILING GRID. FOR AREAS WITHOUT CEILINGS, FIXTURE LOCATIONS ARE DIAGRAMMATIC. THE INTENT IS TO ALIGN, CENTER, OR SPACE FIXTURES BETWEEN ARCHITECTURAL AND STRUCTURAL ELEMENTS. CONTRACTOR TO PAINT EXPOSED RACEWAY TO MATCH ADJACENT SURFACES.
3. FIELD VERIFY EXACT FIXTURE LENGTHS FOR CONTINUOUS ILLUMINATION FOR COVES AND LINEAR RUNS. PROVIDE CONTINUOUS ILLUMINATION WITH NO MORE THAN A 1" GAP BETWEEN THE END OF THE EDGE OF THE WALL / CEILING AND THE FIXTURE.
4. ELECTRICAL CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR PLACEMENT OF FIXTURES WITHIN MECHANICAL ROOMS.
5. ALL ROOM CONTROLLERS AND/OR POWER PACKS SHALL BE INSTALLED IN THE CEILING SPACE DIRECTLY ABOVE THE ENTRY DOOR TO THE SPACE IT IS CONTROLLING.
6. SEE CORRESPONDING LIGHTING DIAGRAMS FOR GENERAL INSTALLATION
7. REQUIREMENTS,CONNECTIONS, AND CABLE TYPES.
8. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO ALL EMERGENCY POWER CONTROL DEVICES FOR PROPER POWER SENSING.
9. PROVIDE UNSWITCHED HOT AHEAD OF RELAY, OCCUPANCY SENSOR, OR SWITCH TO ALL EXIT SIGNS.
10. IF SHOWN, SUBSCRIPT NEAR LIGHT FIXTURES INDICATES CONTROL INTENT. PROVIDE LIGHTING CONTROLLERS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS. PROVIDE ADDITIONAL RELAYS/DIMMERS FOR DAYLIGHT ZONES AS NEEDED.
11. PROVIDE 0-10V DIMMING FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE WALLSTATION CONTROL SEQUENCE AND OR BY TYPE OF CONTROL INTERFACE SHOWN.
12. ALL 277V LIGHTING CIRCUITS TERMINATING AT LIGHTING CONTROL PANELS SHALL HAVE A MINIMUM LENGTH OF 20 FEET BETWEEN LIGHTING CONTROL PANEL AND BRANCH LIGHTING PANEL.
13. CAREFULLY COORDINATE FIXTURE PLACEMENT WITHIN BAFFLED CEILINGS. PENDANT MOUNTED FIXTURE SHALL BE MOUNTED AT THE SAME ELEVATION AS BAFFLES. COORDINATE WITH ARCHITECTURAL RCP AND DETAILS PRIOR TO ROUGH-IN.
14. PROVIDE CONDUIT FROM DEVICE TO DEVICE IN OPEN AND/OR EXPOSED CEILINGS. CEILINGS WITH CLOUDS ARE CONSIDERED OPEN/EXPOSED CEILING. NO EXPOSED CABLES SHALL BE SEEN FROM BELOW.
15. ALL UNDERCABINET LIGHTS MUST BE COORDINATED WITH MILLWORK FOR EXACT LENGTHS. COORDINATE WITH MILLWORK SHOP DRAWINGS.
16. PROVIDE 0-10V DIMMER CONDUCTORS FOR ALL AREAS AND/OR ROOMS WHERE 0-10V DIMMING IS INDICATED BY THE RELAY PANEL SCHEDULE, WALL STATION CONTROL SEQUENCE, OR REQUIRED BY IECC 2021.
17. SUBSCRIPT ADJACENT TO LIGHT FIXTURE INDICATES INTENDED CONTROL GROUPING. PROVIDE LIGHTING CONTROLS WITH THE REQUIRED NUMBER OF RELAYS/DIMMERS AND PROVIDE ADDITIONAL RELAYS DIMMERS FOR DAYLIGHT ZONES AS REQUIRED.
18. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURER'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

SHEET KEYNOTES

L2	MOUNT ROOM CONTROLLER(S) ABOVE ENTRY DOOR ALONG WITH ANY OTHER RELATED MODULES. PROVIDE INDICATOR LABELING ON GRID TILE NEAREST THE ROOM CONTROLLER. COORDINATE WITH ARCHITECT FOR STYLE AND METHOD LABELING. SEE CORRESPONDING ROOM CONTROLLER DIAGRAM S003/E242 FOR MORE INFORMATION.
L3	PROVIDE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN. LOCATE OCCUPANCY SENSOR(S) PER MANUFACTURER'S PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS. PROVIDE ADDITIONAL SENSORS IF REQUIRED TO PROPERLY COVER THE RESPECTIVE ROOM.
L4	PROVIDE LOW VOLTAGE WALLSTATION AS SHOWN. SEE DIAGRAM S002/E421 FOR WALL STATION LAYOUT AND CONFIGURATION.
L5	PROVIDE DAYLIGHT ZONE CONTROL REQUIREMENTS PER IECC-2021 C405.2.3.3. LOCATE DAYLIGHT SENSOR(S) PER MANUFACTURER'S RECOMMENDATION AND WHERE REQUIRED WITHIN THE SPACE FOR PROPER COVERAGE. CONTROL LIGHT FIXTURES WITHIN THE DAYLIGHT ZONE WITH DAYLIGHT SENSOR (PHOTODIODE) AND WIRE THE FIXTURES 0-10V DRIVERS ACCORDINGLY. PROVIDE LLLC OR PROVIDE ALL ADDITIONAL INFRASTRUCTURE TO MEET NEW IECC 2021 REQUIREMENTS WITH DAYLIGHT ZONES AND CONTROL ZONES SHOWN.
L10	SEE LIGHTING PLANS FOR BRANCH CIRCUIT DESIGNATIONS.
L11	SEE LIGHTING PLANS FOR FIXTURE TYPE REQUIREMENTS.
L12	SEE AREA LIGHTING FLOOR PLANS FOR FRONT OF CLASSROOM ORIENTATION. WIRE CLASSROOM IN ACCORDANCE TO WIRING SHOWN IN TYPICAL TO GIVE PROPER CONTROL SCHEME OF LIGHTING.



1 TYPICAL CLASS ROOM LIGHTING
SCALE = 1/4" = 1'-0"

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130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

TYPICAL CLASSROOM LIGHTING PLANS

E201.1

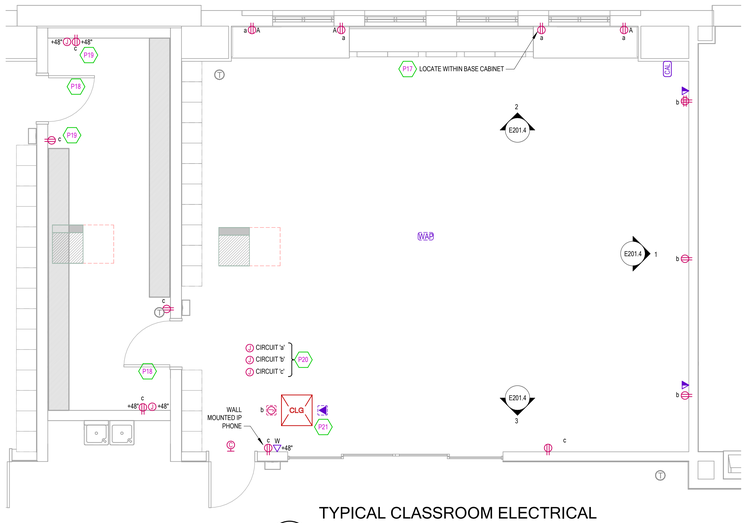
11/8/2023 8:59:46 PM

ENLARGED GENERAL SHEET NOTES

1. PROVIDE MOCK-UP OF ONE CLASSROOM THAT IS TYPICAL OF ALL CLASSROOMS AT THE BEGINNING OF THE ELECTRICAL, AV, AND SYSTEMS ROUGH-IN. COORDINATE WITH GENERAL CONTRACTOR FOR EXACT SCHEDULING REQUIREMENTS. NOTIFY ENGINEER WHEN READY FOR INSPECTION.
2. EXACT ROOM LAYOUTS WILL VARY. SEE PLANS FOR APPROXIMATE EQUIPMENT LOCATIONS AND QUANTITY.
3. ALL CLASSROOM DEVICES LOCATED AT THE TEACHER STATION SHALL BE IN ONE STUD BAY. THE ADJACENT CLASSROOM SHALL BE IN THE OTHER STUD BAY. PROVIDE PUTTY PADS ON ALL DEVICES IN ONE STUD BAY.
4. COORDINATE PLACEMENT OF ELECTRICAL DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN. WHERE DEVICES ARE SHOWN IN SAME WALL SPACE, ALIGN VERTICALLY AND HORIZONTALLY. COORDINATE WITH ARCHITECTURAL DRAWINGS & CABINETRY DRAWINGS.
5. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF DEVICES MOUNTED ABOVE OR BELOW ARCHITECTURAL COUNTERS, CABINETS, ETC. WITH SHOP DRAWINGS PRIOR TO ROUGH-IN. INSTALL DEVICES TO CLEAR BACKSPLASH, CENTERED IN KNEE SPACE, CENTERED BETWEEN SHELVES, ETC.
6. PROVIDE GFCI PROTECTION ON ALL DEVICES AND EQUIPMENT PER THE NEC REQUIREMENTS. DEVICES SHALL BE READILY ACCESSIBLE. IF ANY OUTLET IS INSTALLED WITHIN 6 FEET OF OUTSIDE EDGE OF SINK, CONTRACTOR SHALL PROVIDE GFCI RECEPTACLE PER NEC, WHETHER SHOWN OR NOT.
7. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, AUDIO/VISUAL EQUIPMENT,CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC. AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
8. ALL RECEPTACLES LOCATED THROUGHOUT THE BUILDING SHALL BE TAMPER RESISTANT PER NEC 406.12.

SHEET KEYNOTES

P17	LOCATE OUTLET WITHIN BASE CABINET. FIELD COORDINATE EXACT LOCATION AND ELEVATION WITH MILLWORK SHOP DRAWINGS.
P18	LOCATE DUPLEX RECEPTACLE AND SPARE JUNCTION BOX FOR FUTURE USE AT +48" FOR CHROMEBOOK CART. STUB (1) 1" C. FROM SPARE JUNCTION BOX TO ABOVE ACCESSIBLE CEILING.
P19	DUPLEX AND CHROMEBOOK CART CIRCUITED TO CIRCUIT 'c' OF ADJACENT CLASSROOM.
P20	REFER TO POWER PLANS FOR BRANCH CIRCUIT DESIGNATIONS.
P21	1' X 2' CEILING ENCLOSURE. INSTALL 4-PLEX SPD RECEPTACLE AND 2 DROP DATA OUTLET WITHIN SIDEWALL. PROVIDE A MINIMUM OF (2) GROMMETED 1-1/4" PASS THROUGH OF OPENINGS FOR LOW VOLTAGE CABLING. COORDINATE ROUGH-IN AND EXACT TERMINATION REQUIREMENTS WITH AV INSTALLER. REFER TO TYPICAL CLASSROOM POWER PLAN E3.2 AND AV SHEETS FOR ADDITIONAL INFORMATION.



1 TYPICAL CLASSROOM ELECTRICAL PLAN
SCALE = 1/4" = 1'-0"

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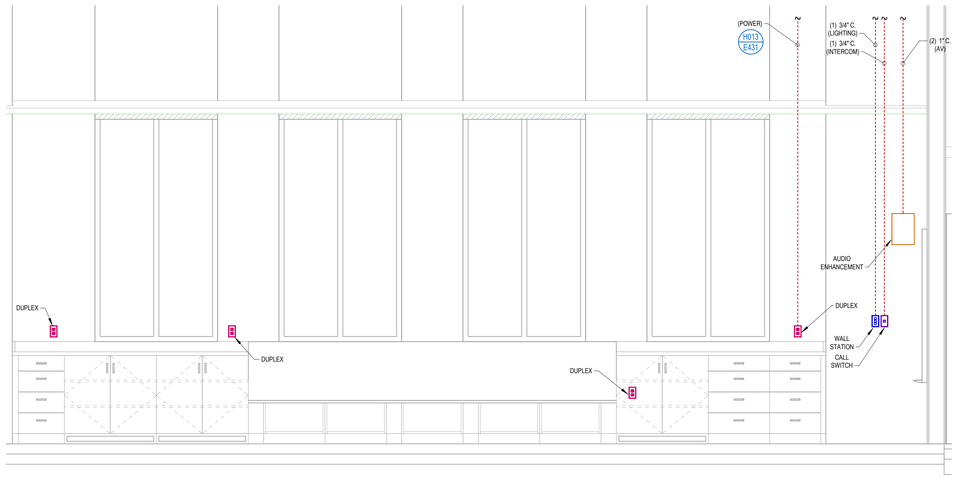
BID PACKAGE 5 - GENERAL CONSTRUCTION

TYPICAL CLASSROOM ELECTRICAL PLAN

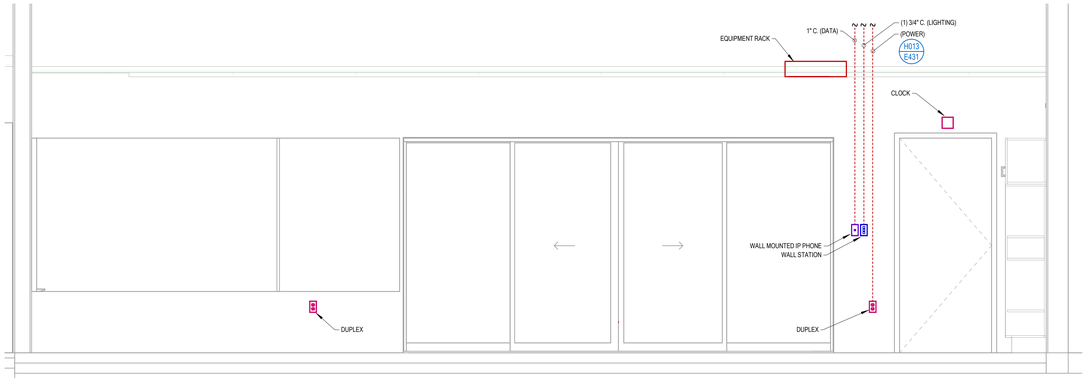
E201.2

11/6/2023 8:59:48 PM

1 TYPICAL CLASSROOM ELECTRICAL PLAN REAR ELEVATION
SCALE = 1/2" = 1'-0"



2 TYPICAL CLASSROOM ELECTRICAL PLAN WINDOW ELEVATION
SCALE = 1/2" = 1'-0"



3 TYPICAL CLASSROOM ELECTRICAL PLAN ENTERANCE
SCALE = 1/2" = 1'-0"

GENERAL ELEVATION SHEET NOTES

1. NON TYPICAL CLASSROOM THROUGH OUT THE BUILDING LAYOUTS VARY. REFER TO PLANS FOR APPROXIMATE AV EQUIPMENT LOCATIONS AND QUANTITIES FOR NON TYPICAL CLASSROOMS.
2. ALL SPECIFIED CONDUITS SHALL BE STUBBED UP INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED. PROVIDE PLASTIC CONDUIT BUSHING AT THE END OF CONDUIT.
3. ALL LOW VOLTAGE WIRE/ CABLES FOR INTERCOM, AV EQUIPMENT, ETC. SHALL BE PROPERLY SUPPORTED AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED AT SERVICE LOOPS MAINTAIN PROPER BEND RADIUS ON ALL CABLE.
4. CABLES SHALL BE BUNDLED BASED ON DIFFERENT SIGNAL TYPES AND DRESSED ACCORDINGLY TO ENSURE THAT CABLING IS TERMINATED, ORGANIZED, AND INSTALLED IN A NEAT AND ORGANIZED WAY TO PROVIDE LONG-TERM QUALITY, SERVICEABILITY,
5. COORDINATE ROUGH-IN LOCATIONS OF ALL DEVICES THROUGHOUT THE ROOM E.G. WALLS & CEILINGS FOR IDEAL PLACEMENT COORDINATE FINAL PLACEMENT WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.

SHEET KEYNOTES

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BID PACKAGE 5 - GENERAL CONSTRUCTION

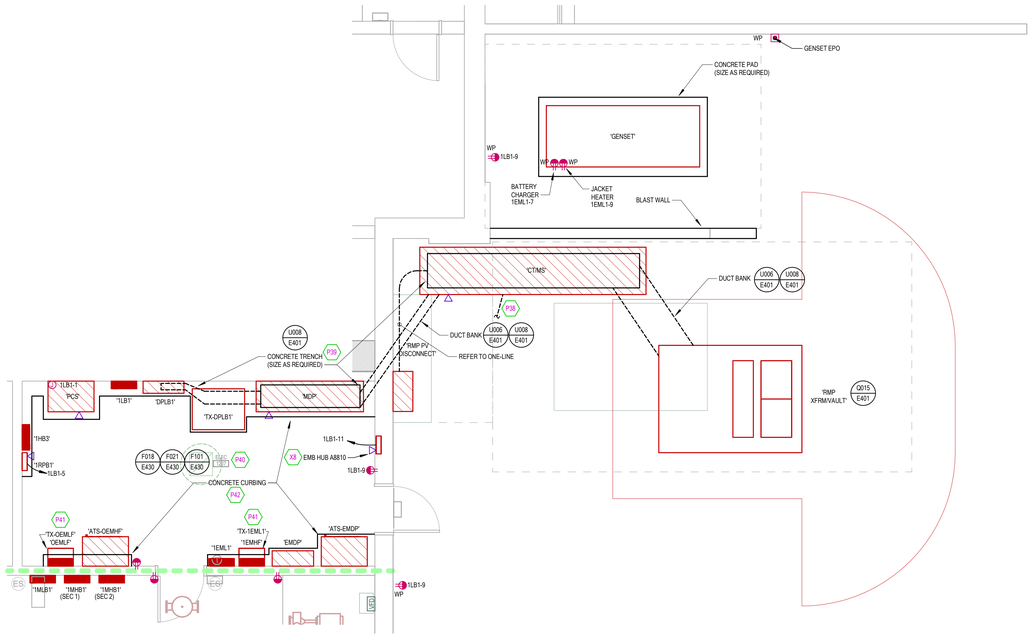
TYPICAL CLASSROOM ELECTRICAL ELEVATIONS

E201.4

11/6/2023 6:59:50 PM

SHEET KEYNOTES

P38	PROVIDE 1" EMPTY CONDUIT AND PULL-STRING FROM MAIN ELECTRICAL SWITCHGEAR BACK TO MAIN BMS PANEL. LABEL CONDUIT WITH SPECIFIC SWITCHGEAR INFORMATION. COORDINATE WITH DIVISION 23 FOR EXACT LOCATION.
P39	PROVIDE CONCRETE TRENCH UNDER MAIN ELECTRICAL GEAR. EXTEND TO OTHER AREAS AS REQUIRED AND AS PRUDENT FOR THE ELECTRICAL CONDUCTOR INSTALLATION. PROVIDE A STEEL PLATE COVER OVER TRENCH BETWEEN SWITCHGEAR. PROVIDE A MONICHOLS GRIP STRUT HEAVY DUTY/WALKWAY RATED STEEL PLATE.
P40	SUBMIT DIMENSIONED DRAWINGS OF ELECTRICAL GEAR AND ENCLOSURES SHOWING ACCURATELY SCALED LAYOUTS OF ENCLOSURES AND REQUIRED INDIVIDUAL PANELBOARD DEVICES, INCLUDING BUT NOT NECESSARILY LIMITED TO, CIRCUIT BREAKERS, FUSIBLE SWITCHES, FUSES, GROUND-FAULT CIRCUIT INTERRUPTERS, AND ACCESSORIES. PROVIDE NECESSARY CURBING AROUND ROOM AND WHERE CONDUITS RISE FROM BELOW. DIVISION 26 RESPONSIBLE FOR FINAL LAYOUT AND ADHERENCES TO NEC CLEARANCES.
P41	IF REQUIRED, MOUNT TRANSFORMER ON WALL LOCATED ABOVE PANELBOARDS. SEE DIAGRAM Q002 AND MANUFACTURERS RECOMMENDATION FOR ADDITIONAL INFORMATION.
P42	PROVIDE 4" HIGH CONCRETE CURBING AT LOCATIONS WHERE CONDUITS EMERGE FROM BELOW SLAB. INSTALL FLOOR STANDING SERVICE EQUIPMENT OF CURBING AND BOLT EQUIPMENT TO CURB WITH 3/8" ANCHORS AT EACH CORNER AND AT INTERVALS NOT TO EXCEED 8' ALONG PERIMETER. INSTALL CONCRETE WIRING TRENCH UNDER FLOOR STANDING EQUIPMENT; 12" DEEP MIN., AND 4" SMALLER IN LENGTH AND WIDTH THAN EQUIPMENT BASE. INSTALL GROUNDING BUSHINGS ON CONDUITS PENETRATING TRENCH. INSTALL DIAMOND PLATED/GRATE COVERS IN ANY AREA WITH EXPOSED TRENCHES. SEE SPECIFICATION 26 0532/26 2713 FOR MORE INFORMATION.
X8	PROVIDE A BUILDING ENERGY AND POWER METERING SYSTEM IN ACCORDANCE WITH IECC 2021. REFER TO SPECIFICATION 26 1010 AND DIAGRAM U601/E434 FOR ADDITIONAL REQUIREMENTS FOR DISTRIBUTION BOARD, PANELBOARD, AND BRANCH PANEL SUB-METERING AND PROVIDE ALL NECESSARY WIRING, INFRASTRUCTURE, INTERCONNECTION, AND EQUIPMENT AS NECESSARY FOR A COMPLETE AND WORKING SYSTEM.



1 ENLARGED MAIN ELECTRICAL ROOM & YARD
SCALE = 1/4" = 1'-0"

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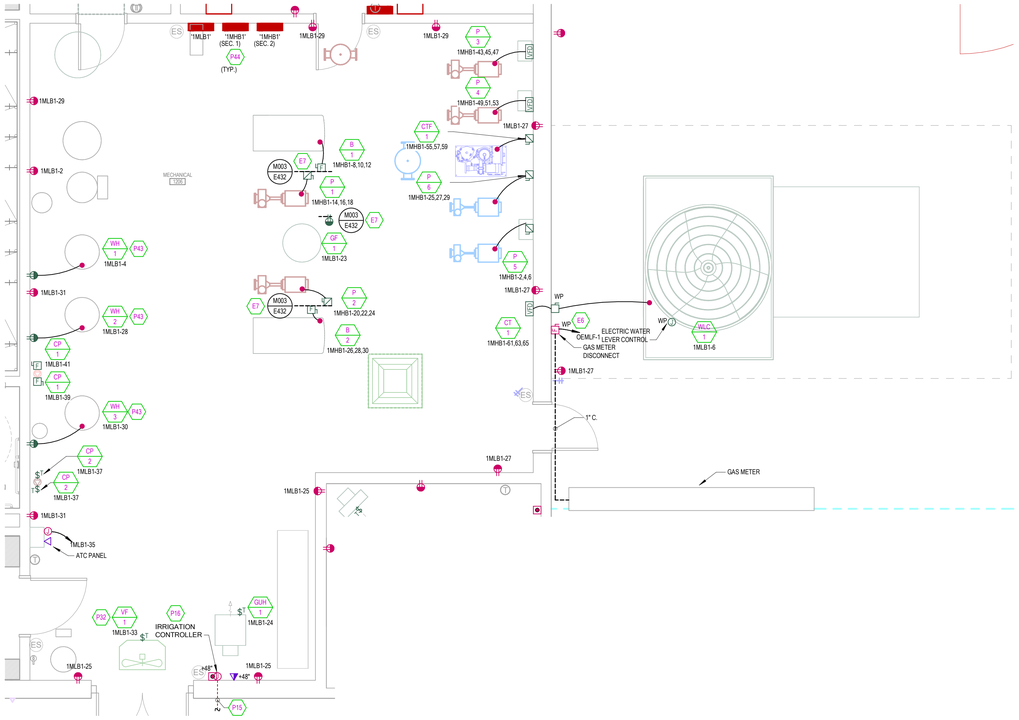
BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED MAIN ELECTRICAL ROOM & YARD

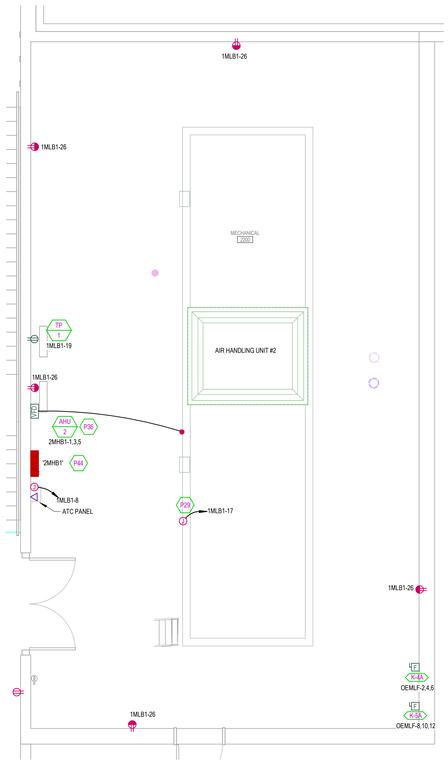
E202

11/8/2023 8:58:52 PM


1MLB1-29
1MLB1-2
1MLB1-31
1MLB1-39
1MLB1-35
ATC PANEL
1MLB1-25
1MLB1-29
1MLB1-27
1MLB1-26
1MLB1-4
1MLB1-28
1MLB1-41
1MLB1-30
1MLB1-37
1MLB1-33
1MLB1-24
IRRIGATION CONTROLLER
1MLB1-23
1MLB1-6
ELECTRIC WATER LEVER CONTROL
GAS METER DISCONNECT
GAS METER
1"C.
MECHANICAL
1201
M003
E432
1MHB1-8,10,12
1MHB1-14,16,18
1MHB1-20,22,24
1MHB1-26,28,30
1MHB1-43,45,47
1MHB1-49,51,53
1MHB1-55,57,59
1MHB1-25,27,29
1MHB1-2,4,6
1MHB1-61,63,65
"1MLB1"
"1MHB1" (SEC. 1)
"1MHB1" (SEC. 2)
P44 (TYP.)

1 MAIN MECHANICAL ELECTRICAL PLAN

SCALE = 1/4" = 1'-0"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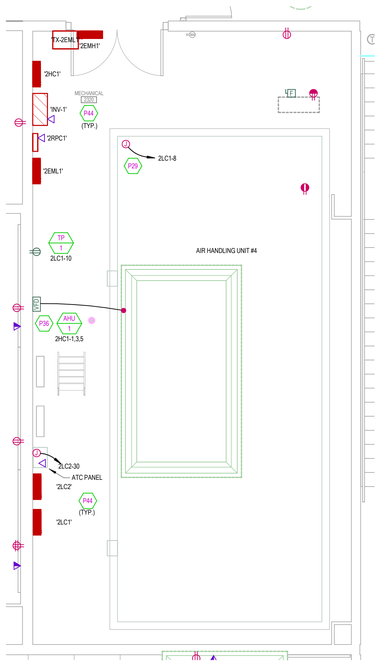
MECHANICAL
2201
AIR HANDLING UNIT #2
1MLB1-19
2MHB1-1,3,5
2MHBT
1MLB1-8
ATC PANEL
1MLB1-17
OEMLF-2,4,6
OEMLF-8,10,12

2 MEZZANINE MECHANICAL ELECTRICAL PLAN

SCALE = 1/4" = 1'-0"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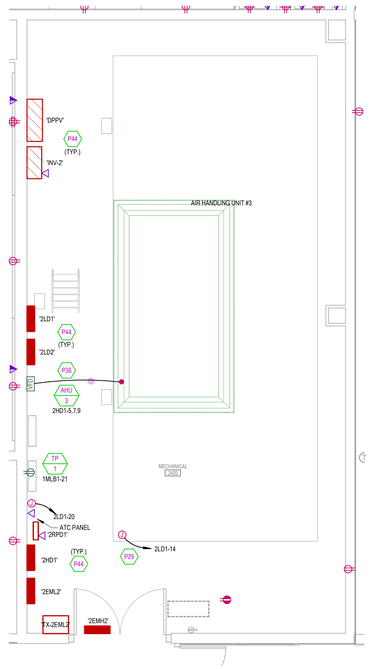
"2EMH"
"2HC1"
"INV-T"
"2RPC1"
"2EML1"
MECHANICAL
1201
2LC1-8
AIR HANDLING UNIT #4
2LC1-10
2HC1-1,3,5
2LC2-30
ATC PANEL
"2LC2"
"2LC1"

3 LEVEL 02 MECHANICAL ELECTRICAL PLAN - AREA 23

SCALE = 1/4" = 1'-0"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"INV-2"
AIR HANDLING UNIT #3
"2LD1"
"2LD2"
2HD1-5,7,9
1MLB1-21
2LD1-20
ATC PANEL
2RPD1
2LD1-14
"2HD1"
"2EML2"
"1X-2EML"
"2EMH2"

4 LEVEL 02 MECHANICAL ELECTRICAL PLAN - AREA 24

SCALE = 1/4" = 1'-0"

SHEET KEYNOTES

E6	POWER FOR GAS METER. LOCATE AC DISCONNECT AT LEAST 15' FROM THE EDGE OF THE METER SET PIPING. DOMINION ENERGY WILL EXTEND POWER FROM AC DISCONNECT TO THEIR EQUIPMENT. COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
E7	PROVIDE UNISTRUT RACKING FOR MOUNTING STARTER/DISCONNECTS. PLACE RACKING AND DISCONNECT SO AS TO NOT BLOCK ACCESS TO MECHANICAL EQUIPMENT.
P15	EXTEND (3) 2" CONDUITS FROM IRRIGATION CONTROLLER OUT INTO LANDSCAPE AREA A MINIMUM OF 10' FROM BUILDING FOOTINGS. COORDINATE IRRIGATION CONTROLLER LOCATION AND CONDUIT "MEET ME" POINT WITH IRRIGATION CONTRACTOR AND LANDSCAPE DRAWINGS PRIOR TO ROUGH-IN.
P16	HARDWIRE POWER AND DATA FOR IRRIGATION CONTROLLER. PROVIDE GROUNDING TO CONTROLLER THAT ACHIEVES LESS THAN 10 OHMS. COORDINATE EXACT TERMINATION LOCATION OF CONTROLLER WITH LANDSCAPE INSTALLER.
P29	PROVIDE 120V POWER CONNECTION FOR INTEGRATED LIGHT FIXTURES AND RECEPTACLES FURNISHED AS PART OF MECHANICAL EQUIPMENT UNIT. COORDINATE WITH SHOP DRAWINGS FOR EXACT LOCATION OF JUNCTION BOX PRIOR TO ROUGH-IN.
P32	FAN TO BE CONTROLLED WITH WALL MOUNTED THERMOSTAT. WIRE AND INTERLOCK MOTORIZED DAMPER WITH FAN OPERATION.
P36	FIELD VERIFY EXACT VFD LOCATION WITH MECHANICAL CONTRACTOR. VFD FURNISHED AND INSTALLED UNDER ANOTHER DIVISION WITH WIRING AND CONNECTIONS BY DIV. 26. REFER TO EQUIPMENT SCHEDULE, SPECIFICATION 26 0501, AND DIV. 23 DRAWINGS FOR ADDITIONAL REQUIREMENTS.
P43	FIELD COORDINATE EXACT TERMINATION REQUIREMENTS AND LOCATION WITH MECHANICAL CONTRACTOR.
P44	FIELD COORDINATE FINAL ELECTRICAL EQUIPMENT LOCATIONS WITHIN MECHANICAL ROOM WITH GENERAL CONTRACTOR AND MECHANICAL CONTRACTOR TO VERIFY FIELD ROUTING OF ALL MECHANICAL PIPING/DUCTWORK WITHIN THE SPACE AND ADJUST PANELBOARD LOCATIONS ACCORDINGLY.

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BID PACKAGE 5 - GENERAL CONSTRUCTION

MAIN LEVEL ENLARGED MECH. PLAN

E203

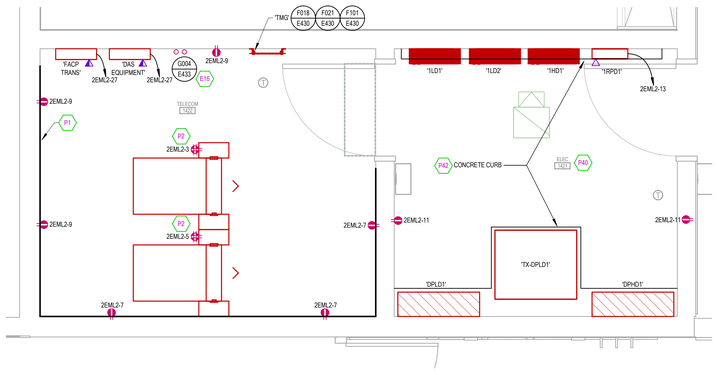
11/6/2023 8:59:55 PM

SHEET KEYNOTES

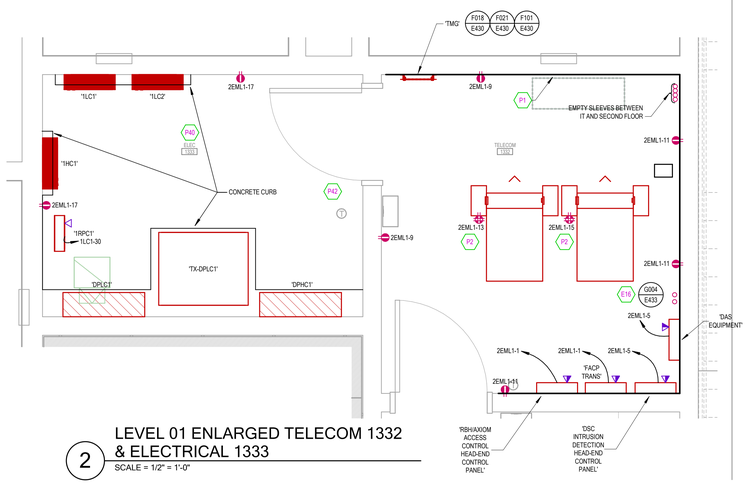
E16	PROVIDE CONDUIT PATHWAYS FROM TELECOM ROOM TO ROOF AS INDICATED BY DIAGRAM G004/E4.51.
P1	PROVIDE 3/4" FIRE-TREATED PLYWOOD ON WALLS. REFER TO SPECIFICATIONS (SECTION 27 1500) FOR REQUIREMENTS.
P2	ROUTE CONDUIT DOWN ALONG RACK POST AND MOUNT DEDICATED EMERGENCY 4-PLEX RECEPTACLE +18" A.F.F.
P40	SUBMIT DIMENSIONED DRAWINGS OF ELECTRICAL GEAR AND ENCLOSURES SHOWING ACCURATELY SCALED LAYOUTS OF ENCLOSURES AND REQUIRED INDIVIDUAL PANELBOARD DEVICES, INCLUDING BUT NOT NECESSARILY LIMITED TO, CIRCUIT BREAKERS, FUSIBLE SWITCHES, FUSES, GROUND-FAULT CIRCUIT INTERRUPTERS, AND ACCESSORIES. PROVIDE NECESSARY CURBING AROUND ROOM AND WHERE CONDUITS RISE FROM BELOW. DIVISION 26 RESPONSIBLE FOR FINAL LAYOUT AND ADHERENCES TO NEC CLEARANCES.
P42	PROVIDE 4" HIGH CONCRETE CURBING AT LOCATIONS WHERE CONDUITS EMERGE FROM BELOW SLAB. INSTALL FLOOR STANDING SERVICE EQUIPMENT OF CURBING AND BOLT EQUIPMENT TO CURB WITH 3/8" ANCHORS AT EACH CORNER AND AT INTERVALS NOT TO EXCEED 8' ALONG PERIMETER. INSTALL CONCRETE WIRING TRENCH UNDER FLOOR STANDING EQUIPMENT; 12" DEEP MIN., AND 4" SMALLER IN LENGTH AND WIDTH THAN EQUIPMENT BASE. INSTALL GROUNDING BUSHINGS ON CONDUITS PENETRATING TRENCH. INSTALL DIAMOND PLATED/GRATE COVERS IN ANY AREA WITH EXPOSED TRENCHES. SEE SPECIFICATION 26 0532/26 2713 FOR MORE INFORMATION.

GENERAL ELECTRICAL/COMM SHEET NOTES

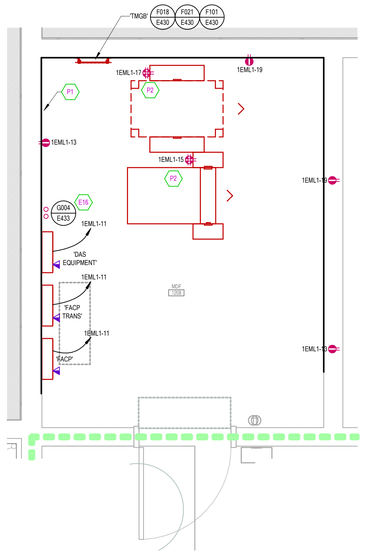
1. HEIGHTS SHOWN ARE TYPICAL TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE. ALL DEVICES OUTLETS SHALL BE MOUNTED VERTICALLY.
2. MOUNTING HEIGHTS SHOWN ON ARCHITECTURAL ELEVATIONS SHALL GOVERN OVER THOSE SHOWN.
3. ALL DEVICES INDICATED TO BE INSTALLED AT DIFFERENT MOUNTING HEIGHTS AND THE SAME SIDE OF THE STUD. WHERE WALL MOUNTED TELEPHONES OCCUR OVER LIGHT SWITCHES, VOLUME CONTROLS, ETC. OFFSET ONE STUD SPACE.
4. ALL EXPOSED RACEWAYS SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO WALLS OR STRUCTURAL MEMBERS SUCH THAT THEY FOLLOW STRUCTURAL SURFACE CONTOURS AND SHALL BE INSTALLED SUCH THAT THEY DO NOT OBSTRUCT PASSAGEWAYS. MULTIPLE RACEWAYS SHOULD BE INSTALLED GROUPED TOGETHER. THE LOCATION OF THESE RACEWAYS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION. (EXTRA TIME SHOULD BE ALLOWED FOR THIS REVIEW AND APPROVAL.)
5. ALL BACK BOXES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT AND BACK BOXES IN POURED CONCRETE, MASONRY, AND GYP WALLS.
6. DATA GIVEN ON THE DRAWINGS IS AS EXACT AS COULD BE SECURED, ABSOLUTE ACCURACY IS NOT GUARANTEED AND THE CONTRACTOR SHALL OBTAIN AND VERIFY EXACT LOCATIONS, MEASUREMENTS, LEVELS, SPACE REQUIREMENTS, POTENTIAL CONFLICTS WITH OTHER TRADES, ETC. AT THE SITE AND SHALL SATISFACTORILY ADAPT HIS WORK TO ACTUAL CONDITIONS AT THE BUILDINGS. THE DRAWINGS ARE DIAGRAMMATICAL IN NATURE AND SHALL NOT BE SCALED. HOWEVER THIS DOES NOT RELIEVE ANY SUB-CONTRACTOR FROM COORDINATING HIS WORK WITH ALL OTHER TRADES AND FROM ADJUSTING HIS WORK AS REQUIRED BY THE ACTUAL CONDITIONS OF THE PROJECT. THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING A BID TO BECOME THOROUGHLY FAMILIAR WITH THE ACTUAL CONDITIONS OF THE PROJECT.
7. COORDINATE AND ADJUST ALL WORK BETWEEN TRADES AND EXISTING CONDITIONS IN ORDER TO ACCOMPLISH A NEAT, INTEGRATED AND EFFICIENT INSTALLATION WHICH INCLUDE BUT IS NOT LIMITED TO:
   - A. EXAMINE THE CONTRACT DOCUMENTS OF ALL TRADES (I.E. THE ARCHITECTURAL REFLECTED CEILING PLAN, MECHANICAL HVAC DRAWINGS, ELECTRICAL LIGHTING PLAN, TECHNOLOGY PLAN, FIRE PROTECTION PLAN, ETC.)
   - B. COORDINATE NECESSARY EQUIPMENT, FIXTURES, ETC. SO THAT THE FINAL INSTALLATION IS COMPATIBLE WITH THE MATERIALS AND EQUIPMENT OF THE OTHER TRADES.
   - C. THIS CONTRACTOR SHALL ASSIST THE DIVISION 21, 22 AND 23 CONTRACTOR IN PREPARING SHOP DRAWINGS FOR COORDINATING INSTALLATION OF ALL WORK (I.E. LOCATING ALL CEILING CLEARANCES, CABLE TRAY, CLEARANCES THROUGHOUT, ETC.)
1. ALL COMMUNICATIONS RACEWAY AND PATHWAYS INCLUDING BUT NOT LIMITED TO CONDUIT, SLEEVES, CABLE TRAY, J-HOOKS SHALL BE INSTALLED TO MINIMIZE UNNECESSARY CABLE LENGTHS AND MAINTAIN INDUSTRY STANDARD LENGTH
2. LIMITATIONS FOR HORIZONTAL CABLE DISTRIBUTION (I.E. CATEGORY CABLING). NO HORIZONTAL CABLE LENGTH (PERMANENT LINK) SHALL EXCEED 90 METERS (295 FEET). PAY SPECIAL ATTENTION WITH TELECOM ROOMS BEING LOCATED ON THE 2ND LEVEL AND SPANNING BETWEEN FLOORS. PROVIDE ONDUIT SLEEVES AND RACEWAYS AS REQUIRED.
3. PROVIDE PROPER GROUNDING/BONDING THROUGHOUT TELECOMMUNICATIONS SYSTEM (REFERENCE DIAGRAM F021).ALL COMMUNICATIONS CONDUIT, CABLE TRAYS, LADDER RACKS AND EQUIPMENT RACKS SHALL BE BONDED TO BUILDING GROUND SYSTEM PER NEC 250.
4. ALL TELE/DATA CONDUIT AND OTHER RACEWAY INFRASTRUCTURE SHALL HAVE NO LESS THAN 30% SPARE CAPACITY ABOVE THE NEC MINIMUM FILL RATIOS.
5. ALL RISER CONDUIT SHALL BE STUBBED A MINIMUM OF 2" AFF. PROVIDE A 2" CURB IF SLAB BLOCK-OUT IS USED RATHER THAN SLEEVES. SERVICE PROVIDER AND UNDERGROUND CONDUIT SHALL BE STUBBED A MINIMUM OF 4" AFF.
6. ALL UNDERGROUND COMMUNICATIONS CONDUIT SHALL HAVE METALLIC LOCATER TAPE.
7. ENSURE THAT ALL CABLE TRAY INSTALLED COMPLIES WITH NEC 392. ONCE ALL CABLING HAS BEEN INSTALLED, CONTRACTOR SHALL PROVIDE AVAILABLE CABLE FILL DOCUMENTATION TO OWNER.
8. REFER TO OWNER HEATMAPS FOR ALL WIRELESS ACCESS POINT LOCATIONS. REFER TO RISER DIAGRAM AND SPECIFICATION 271500 FOR ADDITIONAL REQUIREMENTS.
9. COORDINATE ALL FURNITURE TERMINATION LOCATIONS WITH FURNITURE SHOP DRAWINGS AND INSTALLER PRIOR TO ROUGH-IN. DEVICE LOCATIONS SHOWN ARE FOR TECHNICAL INFORMATION ONLY. PROVIDE FURNITURE BOXES COMPATIBLE WITH FURNITURE SYSTEM.
10. PROVIDE (2) WATERFALLS FROM CABLE TRAY PER RACK.



1 LEVEL 01 ENLARGED ELECTRICAL 1421 AND TELECOM 1422
SCALE = 1/2" = 1'-0"



2 LEVEL 01 ENLARGED TELECOM 1332 & ELECTRICAL 1333
SCALE = 1/2" = 1'-0"



3 LEVEL 01 - ENLARGED MDF 1208
SCALE = 1/2" = 1'-0"

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

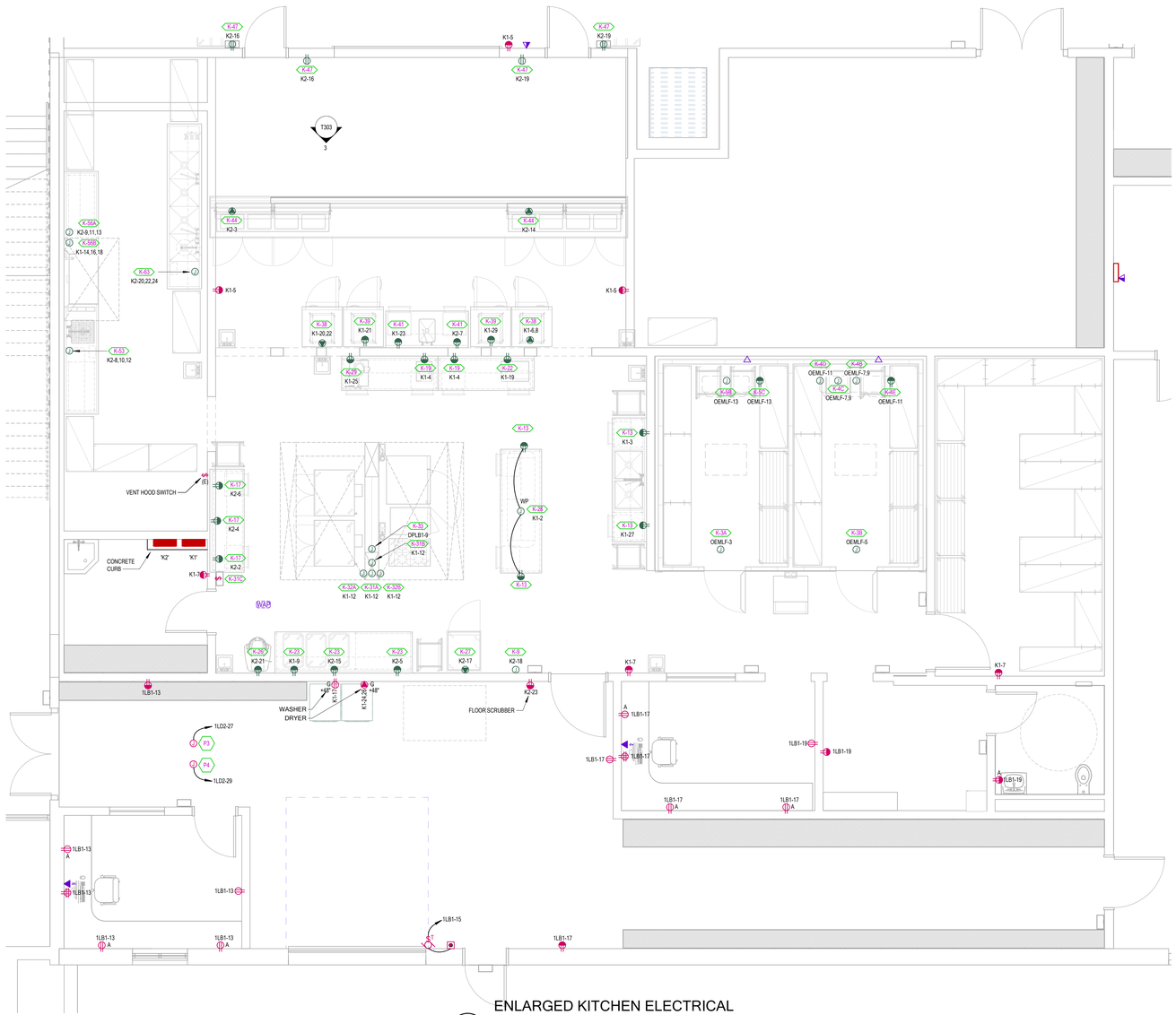
ENLARGED ELECTRICAL/TELECOM ROOMS

E204

11/6/2023 6:59:58 PM

SHEET KEYNOTES

P3	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR VAV CONTROL TRANSFORMER. CONTROLS CONTRACTOR TO MAKE CONNECTION TO CONTROL TRANSFORMER AND VAV BOXES. COORDINATE EXACT LOCATION OF JUNCTION BOXES WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
P4	PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING FOR FIRE/SMOKE DAMPERS. CONTRACTOR TO COORDINATE ALL LOCATIONS OF FIRE/SMOKE AND SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. CONTRACTOR TO PROVIDE POWER, MONITOR MODULES, AND RELAYS AS REQUIRED FOR A COMPLETE SYSTEM.



1 ENLARGED KITCHEN ELECTRICAL PLAN
SCALE = 1/4" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE

GENERAL NOTES:

1. EQUIPMENT SHOWN IS FOR ELECTRICAL INFORMATION ONLY. THERE IS NO REFERENCE TO THE QUANTITY OF EQUIPMENT LOCATED IN EACH SPACE.

2. THE UTILITY DISTRIBUTION STSTEM (UDS) IS SUPPLIED WITH AN INTEGRAL LOAD-CENTER. ELECTRICAL CONTRACTOR SHALL PROVIDE SINGLE POINT CONNECTION TO THE LOAD CENTER.THE UDS IS SUPPLIED WITH HEAVY DUTY CORDS WITH RESTRAINING DEVICES. THE ELECTRICAL CONTRACTOR SHALL INSTALL THE CORDS AS REQUIRED. COORDINATE WITH THE KEC FOR REMOVAL OF ANY CORDS, OR FOR ADDITIONAL MATERIALS REQUIRED TO COMPLETE THE INSTALLATION OF EACH DEVICE.

3. PER NEC 250.122(A), EQUIPMENT GROUND IS NOT REQUIRED TO BE LARGER THAN PHASE CONDUCTOR.

4. CONTRACTOR SHALL REFER TO FOOD SERVICE EQUIPMENT DRAWINGS FOR ALL DEVICE AND HARDWARE CONNECTION DIMENSIONS INCLUDING MOUNTING HEIGHTS FOR ALL DEVICES SERVING FOOD SERVICE EQUIPMENT.

5. EQUIPMENT CONNECTIONS, VOLTAGES, AMPERAGES AND DEVICE RATINGS INDICATED IN THE KITCHEN EQUIPMENT SCHEDULE ARE BASED UPON THE LATEST DRAWINGS, SPECIFICATIONS AND CUTSHEETS THAT COULD BE PROCURED FROM THE FOOD SERVICE CONSULTANT'S DOCUMENTS. PRIOR TO FINAL CONNECTION THE CONTRACTOR SHALL VERIFY THE CONNECTION REQUIREMENTS WITH THE MOST CURRENT FOOD SERVICE DOCUMENTS (KITCHEN EQUIPMENT CONTRACTOR) (KEC). ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER.

6. PROVIDE ALL CONDUITS REQUIRED FOR REFRIGERATION AND BEVERAGE SYSTEM LINES.

7. PROVIDE FLEXIBLE CONDUIT AND FITTINGS AS REQUIRED FOR KITCHEN EQUIPMENT THAT WILL BE CONNECTED PERMANENTLY. ALLOW ENOUGH SLACK TO MOVE EQUIPMENT FOR CLEANING.

8. COORDINATE WITH PLUMBING AND MECHANICAL PIPING TO AVOID CONFLICTS.

9. PROVIDE ALL INTERCONNECTING CONDUIT AND WIRE BETWEEN EACH DISPOSER AND THE SWITCH AND ALL COMPONENTS.

10. PRE-FABRICATED COLD STORAGE ROOMS (CSR) (WALK-IN COOLER/FREEZER): PROVIDE ALL INTERCONNECTING CONDUIT, SEAL-OFFS, SEALANT, WIRE AND ALL FINAL CONNECTIONS TO PROVIDE THE FOLLOWING:
   A.INSTALL AND CONNECT LIGHT FIXTURES, SPLICE BOXES, LAMPS, LIGHT SWITCHES AND DOOR HEATERS SUPPLIED BY THE KEC.
   B.CONNECT CSR DEFROST, DRAIN LINE HEATERS, THERMOSTATS, TIME CLOCKS, EVAPORATIVE TERMINAL BLOCK, SWITCH, FAN DOOR SWITCH AND COMPRESSOR CONTROL PANEL, ETC. SUPPLIED BY THE KEC.
   C.PROVIDE CONDUIT AND WIRE BETWEEN CONDENSERS AND EVAPORATORS PER KEC DETAILS.
   D.INSTALL CONDUIT AND BOXES ON THE EXTERIOR OF THE CSR AND PENETRATE THE CSR CEILING AT A POINT WHERE THE CONDUIT CAN DROP DIRECTLY INTO THE POINT OF CONNECTION. DO NOT INSTALL CONDUIT ON THE INTERIOR OF THE CSR. SEAL ALL PENETRATIONS WITH CAULKING AND...

11. PROVIDE ALL DISCONNECT SWITCHES WHERE REQUIRED BY NEC.

12. ALL 20A 120V RECEPTACLES IN FOOD PREPARATION AREA SHALL BE GFCI PROTECTED.

13.TYPE 1 HOODS (VENTILATORS): PROVIDE ALL INTERCONNECTING CONDUIT AND WIRE TO ACCOMPLISH THE FOLLOWING:
   A.PROVIDE ALL WIRING FOR OPERATION OF THE FIRE SUPPRESSION SYSTEM.
   B.INTERFACE HOOD CONTROL PANEL TO ALL ELECTRICAL CONNECTIONS LOCATED WITHIN AND UNDER THE HOOD, INCLUDING POWER FOR COOKING EQUIPMENT, HOOD LIGHTS, ETC.
   C.INTERFACE HOOD CONTROL PANEL TO ALL ELECTRICAL CONNECTIONS LOCATED WITHIN AND UNDER THE HOOD, INCLUDING POWER FOR COOKING EQUIPMENT, HOOD LIGHTS, ETC. SHUNT ALL POWER WHEN IN ALARM CONDITION.
   D.CONNECT THE MICRO-SWITCH AND SOLENOID FUEL SHUT-OFF VALVE (SUPPLIED BY THE KEC).
   E.PROVIDE RELAYS AND ALL WIRING AS REQUIRED TO MAKE CONNECTIONS TO EXHAUST FANS AND MAKE UP AIR FANS. COORDINATE WITH ATC CONTRACTOR FOR ALL REQUIREMENTS....

14.CONTRACTOR SHALL PROVIDE PROPER SEALING OF RACEWAYS THAT ARE EXPOSED TO WIDELY VARYING TEMPERATURES INCLUDING BUT NOT LIMITED TO WALK-IN COOLERS AND FREEZERS PER NEC 300.7(A).

15.COORDINATE WITH KEC FOR ALL REQUIREMENTS OF THE KITCHEN EQUIPMENT COMPONENTS REQUIRING INSTALLATION, MOUNTING HEIGHTS, INTER-WIRING REQUIREMENTS, ETC.

CB = CIRCUIT BREAKER - THERMAL MAGNETIC

UNIT	#	DESCRIPTION	ELECTRICAL EQUIPMENT INFORMATION							WIRE				OCPD			REMARKS
			LOAD														
			HP	FLA	MCA	VA	VOLTAGE	PHASE	FULL LOAD AMPS	CONDUIT SIZE	SETS	QTY	SIZE	EQ. GROUND	TYPE	AMPS	STARTER/ DISC/ VFD OTHER (SEE NOTES)	
K	3A	WALK-IN FREEZER: LIGHTS AND HEATER	0.00	2.3 A	0 A	0 VA	120 V	1	2 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	3B	WALK-IN COOLER: LIGHTS AND HEATER	0.00	1.8 A	0 A	0 VA	120 V	1	2 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	4A	FREEZER REFRIGERATION: CONDENSER	0.00	12.3 A	0 A	0 VA	208 V	3	12 A	3/4"	1	3	12	12	CB	20 A	2 A	
K	4B	FREEZER REFRIGERATION: EVAPORATOR	0.00	1 A	0 A	0 VA	208 V	1	1 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	4C	FREEZER REFRIGERATION: DEFROST	0.00	9.8 A	0 A	0 VA	208 V	1	10 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	4D	FREEZER REFRIGERATION: HEAT TRACE	0.00	3 A	0 A	0 VA	120 V	1	3 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	4E	TEMPERATURE MONITOR	0.00	2 A	0 A	0 VA	120 V	1	2 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	5A	WALK-IN COOLER REF: CONDENSER	0.00	9.4 A	0 A	0 VA	208 V	3	9 A	3/4"	1	3	12	12	CB	15 A	2 A	
K	5B	WALK-IN COOLER REF: BLOWER COILS	0.00	1.6 A	0 A	0 VA	120 V	1	2 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	5C	TEMPERATURE MONITOR	0.00	2 A	0 A	0 VA	120 V	1	2 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	9	ICE MAKER	0.00	14.2 A	0 A	0 VA	120 V	1	14 A	3/4"	1	2	12	12	CB	25 A	11 A	
K	13	PREP SINK/WORK TABLE	0.00	10 A	0 A	0 VA	120 V	1	10 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	17	WORK TABLE	0.00	10 A	0 A	0 VA	120 V	1	10 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	19	WORK TABLE	0.00	10 A	0 A	0 VA	120 V	1	10 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	22	MICROWAVE OVEN	0.00	17.7 A	0 A	0 VA	120 V	1	18 A	3/4"	1	2	10	10	CB	30 A	12 A	
K	23	WORK TABLE	0.00	10 A	0 A	0 VA	120 V	1	10 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	26	30 QUART MIXER	0.00	9.5 A	0 A	0 VA	120 V	1	10 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	27	FOOD WARMING CABINET	0.00	19.1 A	0 A	0 VA	120 V	1	19 A	3/4"	1	2	10	10	CB	30 A	12 A	
K	28	WORK TABLE	0.00	10 A	0 A	0 VA	120 V	1	10 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	29	SLICER	0.00	0 A	0 A	800 VA	120 V	1	7 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	31A	EXHAUST HOOD	0.00	0 A	0 A	900 VA	120 V	1	8 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	31B	EXHAUST HOOD: HEAT SENSOR	0.00	2 A	0 A	0 VA	120 V	1	2 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	31C	EXHAUST HOOD: HEAT SENSOR	0.00	1 A	0 A	0 VA	120 V	1	1 A	3/4"	1	2	12	12	CB	15 A	0 A	
K	32A	GAS SHUT OFF VALVE	0.00	1 A	0 A	0 VA	120 V	1	1 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	32B	FIRE PROTECTION SYSTEM	0.00	2 A	0 A	0 VA	120 V	1	2 A	3/4"	1	2	12	12	CB	15 A	11 A	
K	33	UTILITY DISTRIBUTION SYSTEM	0.00	54 A	0 A	0 VA	208 V	3	54 A	1"	1	3	4	8	CB	90 A	11 A	PROVIDE 5-WIRE FEEDER
K	38	ROLL-IN FOOD WARMER	0.00	7.8 A	0 A	0 VA	208 V	1	8 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	39	ROLL-IN REFRIGERATOR	0.00	10.6 A	0 A	0 VA	120 V	1	11 A	3/4"	1	2	12	12	CB	20 A	12 A	
K	41	UTILITY COUNTER	0.00	10 A	0 A	0 VA	120 V	1	10 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	44	HOT/COLD FROZEN FOOD WELLS	0.00	23.7 A	0 A	0 VA	120 V	1	24 A	3/4"	1	2	10	10	CB	40 A	12 A	
K	47	MILK COOLER	0.00	2.7 A	0 A	0 VA	120 V	1	3 A	3/4"	1	2	12	12	CB	15 A	12 A	
K	53	DISPOSER	2.00	0 A	0 A	0 VA	208 V	3	8 A	3/4"	1	3	12	12	CB	15 A	11 A	
K	56A	DISHWASHER	0.00	55 A	0 A	0 VA	208 V	3	55 A	1"	1	3	4	8	CB	90 A	11 A	
K	56B	DISHWASHER	0.00	83.9 A	0 A	0 VA	208 V	3	84 A	1 1/4"	1	3	1	6	CB	150 A	11 A	
K	63	DISPOSER	2.00	0 A	0 A	0 VA	208 V	3	8 A	3/4"	1	3	12	12	CB	15 A	11 A	

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

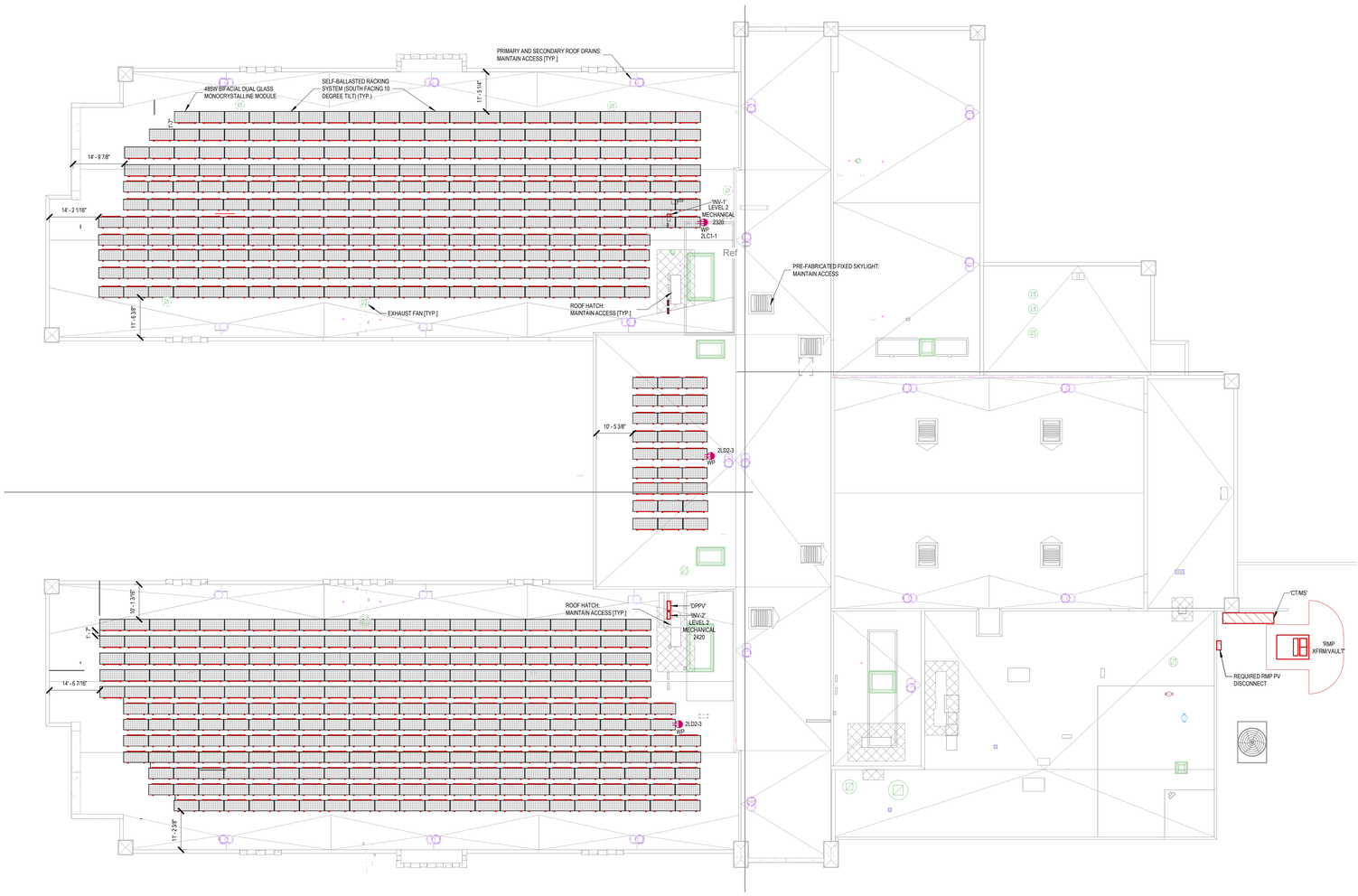
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED KITCHEN ELECTRICAL PLAN

E205

11/6/2023 7:00:02 PM



BID ALTERNATE #1
OVERALL ROOF ELECTRICAL/PV PLAN
SCALE = 1/16" = 1'-0"

PV INSTALLER/DIVISION 26 COORDINATE FINAL ROOF EQUIPMENT AND PENETRATIONS WITH ALL TRADES. ADJUST LAYOUT ACCORDINGLY

ROOF LEGEND

- SINGLE PLY ROOFING MEMBRANE
- TAPERED INSULATION CRICKET MINIMUM SLOPES: 1/8" ALONG VALLEY, 1/4" ACROSS CRICKET
- PROTECTIVE WALKABLE SURFACE
- DECK RIDGE OR VALLEY
- IMAGINARY VALLEY WITH WARPED DECKING
- AREAS HATCHED AS SUCH SHALL NOT HAVE ANY PENETRATIONS THRU THE ROOF IN ORDER TO MAINTAIN THE 2 HOUR FIRE WALL ASSEMBLY LOCATED BELOW THE DECK (AS PER 2015 IBC SECTION 706.6).
- PRIMARY AND SECONDARY ROOF DRAINS
- PRE-FABRICATED FIXED SKYLIGHT TYPICAL SIZE: 60x72 DIMENSIONED TO THE CENTERS
- PHOTOVOLTAIC PANEL + RACKING

ROOFING GENERAL NOTES

1. CONTRACTOR SHALL NOT INSTALL ELECTRICAL CONDUIT(S) THROUGH THE NEW MECHANICAL CURB AND/OR DUCTWORK. LOCATE ELECTRICAL CONDUITS A MINIMUM OF 12" AWAY FROM MECHANICAL CURB ALONG WITH MAINTAINING A MINIMUM OF 12" BETWEEN ANY CONDUIT AND ANY OTHER OBSTACLE. CONDUITS MUST EXTEND 24" FROM DECK WITH 16"-18" OF CONDUIT PROTRUDING FROM FINISHED ROOF LINE. PROVIDE LIQUID TIGHT CONDUIT FROM CONDUIT STUB TO FINAL CONNECTION AT EQUIPMENT. COORDINATE ANY AND ALL OTHER REQUIRED ROOFING REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.

GENERAL SHEET NOTES

1. WORKMANSHIP THROUGHOUT THE INSTALLATION SHALL BE CONSISTENT FROM ONE PV ARRAY/RACK TO THE NEXT. INSTALLATION IS EXPECTED TO BE NEAT, HAVE A GOOD MECHANICAL APPEARANCE AND CONFORM TO BEST ELECTRICAL CONSTRUCTION PRACTICES. WHEREVER POSSIBLE, SUPPORT AND SECURE ALL PV WIRING TO RACKING BENEATH MODULES IN MANNER THAT WIRING IS PROTECTED FROM PHYSICAL DAMAGE. CONTRACTOR SHALL SUBMIT CONDUIT ROUTING DETAIL TO ENGINEER FOR REVIEW PRIOR TO ROUGH-IN/INSTALLATION.
2. PV WIRING BETWEEN ROWS SHALL BE INSTALLED IN MINIMUM 3/4" IMC CONDUIT MOUNTED A MINIMUM OF 1" ABOVE THE ROOF. IMC CONDUIT SHALL BE SECURELY FASTENED AT INTERVALS NOT TO EXCEED 10 FEET AND WITHIN 3 FEET OF BOX OR TERMINATION POINT.
3. PROVIDE PROPER ELECTRICAL IDENTIFICATION AND LABELING OF PV EQUIPMENT AS REQUIRED BY THE LATEST VERSION OF THE NEC 690 AND 705. REFER SPECIFICATION SECTION 26 0553, 26 3100, NEC, AND RMP E.G. EQUIPMENT IDENTIFICATION LABELS OF ENGRAVED PLASTIC-LAMINATE (RED BACKGROUND WITH WHITE ENGRAVING), ETC.
4. MAINTAIN A MINIMUM OF AT LEAST 10' BETWEEN PV SYSTEM COMPONENTS AND ROOF EDGE.

GENERAL PHOTOVOLTAIC NOTES

BASE BID:

PROVIDE CONDUIT ONLY FOR FUTURE PV GEAR. PROVIDE THE REQUIRED CONDUIT PATHWAYS WITH PULL STRINGS AS INDICATED BELOW. REFER TO ONE-LINE FOR CONDUIT SIZES. IF ALTERNATE #1 IS NOT ACCEPTED, DO NOT PROVIDE THE PHOTOVOLTAIC SYSTEM, AND DO NOT PROVIDE THE SPECIFIED POWER CONDITIONING SYSTEM PER CONSTRUCTION DOCUMENTS.

- 'CT/MS' TO RMP PV DISCONNECT
- RMP PV DISCONNECT TO 'DPPV'
- 'DPPV' TO INVERTERS #1 AND #2

BID ALTERNATE #1

SPECIFICATIONS: REFER TO ELECTRICAL SPECIFICATION AND SECTION 26 3100, TURNKEY PHOTOVOLTAIC (PV) RENEWABLE ENERGY SYSTEM FOR MORE INFORMATION. NO PRODUCT ALTERNATIVES WILL BE ACCEPTED.

SYSTEM OUTPUT REQUIREMENTS: THE CONTRACTOR TO FURNISH A COMPREHENSIVE DECENTRALIZED ROOFTOP PHOTOVOLTAIC SYSTEM. THIS SYSTEM MUST DEMONSTRATE A MINIMUM ANNUAL PRODUCTION CAPABILITY OF 407 MWh, WITH AN ANNUAL DEGRADATION RATE NOT EXCEEDING 1%. THE ALL-ENCOMPASSING SYSTEM MUST ENCOMPASS VARIOUS COMPONENTS, INCLUDING, BUT NOT LIMITED TO, SOLAR MODULES, INVERTERS, SELF-BALLASTED RACKING SYSTEMS, POWER OPTIMIZERS, CONDUITS, CONDUCTORS, TERMINATIONS, ETC.

THE CONTRACTOR BEARS THE RESPONSIBILITY OF EXECUTING THE FINAL DESIGN, PROCUREMENT, INSTALLATION, AND COMMISSIONING PROCEDURES NECESSARY TO ESTABLISH A FULLY OPERATIONAL PHOTOVOLTAIC SYSTEM THAT ALIGNS WITH THE SPECIFICATIONS DELINEATED THROUGHOUT THE CONSTRUCTION DOCUMENTS. ACCORDING TO PRELIMINARY CALCULATIONS, THE SYSTEM SHOULD BE SIZED AT APPROXIMATELY 263 kWp INSTALLED DC POWER, WITH PANELS INCLINED AT A 10-DEGREE ANGLE, RESULTING IN A MAXIMUM ACHIEVED AC POWER OUTPUT OF 240.00 kW. THE DEFINITIVE CONFIGURATION OF THE SYSTEM WILL BE DETERMINED BY THE CONTRACTOR TO MEET THE SPECIFIED ENERGY PRODUCTION GOAL AS PREVIOUSLY INDICATED.

INVERTER, RACKING AND PV MODULE REQUIREMENTS:
1. LOCATE INVERTERS WITHIN 2ND-FLOOR ELECTRICAL ROOMS OR AS INDICATED IN THE PLANS.

2. MOUNT THE PHOTOVOLTAIC (PV) PANELS ON THE ROOF USING AN ENGINEERED BALLASTED ROOF MOUNT SYSTEM. PROVIDE THE NECESSARY MOUNTING SYSTEM, FRAMES, AND RACKS TO SUPPORT THE PV PANELS, MAINTAINING AN ANGLE BETWEEN 10 TO 20 DEGREES FROM THE HORIZONTAL.

3. INCLUDE ALL NECESSARY COMPONENTS AND APPURTENANCES TO SECURELY MOUNT THE PV PANELS ONTO THE ROOFING MATERIAL, ENSURING THEY ARE POSITIONED AT LEAST 10 INCHES ABOVE THE ROOF SURFACE.

4. WHENEVER POSSIBLE, ROUTE FEEDERS TO THE INVERTERS IN THE CEILING SPACE BELOW THE ROOF DECK.

5. INSTALL ROOF FLASHING FOR ALL CONDUITS THAT PENETRATE THE ROOF MEMBRANE TO MAINTAIN WATERTIGHT INTEGRITY.

6. USE IMC CONDUIT FOR ALL WIRING FROM THE INVERTERS TO THE SOLAR MODULES AND ENSURE THAT THE WIRING IS OF THE 1000-VOLT TYPE PV-WIRE CU."

ROOF PV LAYOUT AND ZONING: THE PRESENTED LAYOUT IS A PRELIMINARY PROPOSED PV ARRAY LAYOUT WITH SPECIFIC PARAMETERS (AZIMUTH: 180°, TILT: 10°). IT IS IMPERATIVE FOR THE CONTRACTOR TO COLLABORATE AND COORDINATE THE PRECISE POSITIONING OF ALL ROOFTOP EQUIPMENT WITH OTHER TRADES BEFORE PROCEEDING WITH THE SYSTEM DESIGN. IN CASES WHERE OBSTACLES OR POTENTIAL SHADING ISSUES ARE IDENTIFIED, THE CONTRACTOR SHOULD CONDUCT A SHADING STUDY TO SUBSTANTIATE AND VALIDATE THE PROPOSED PANEL LOCATIONS.

POWER COMPANY COORDINATION: THE SELECTED PROPOSER/CONTRACTOR SHALL COMPLETE AND SUBMIT ALL REQUIRED ROCKY MOUNTAIN POWER SOLAR DEPARTMENT (RMP) INTERCONNECTION AND NET-METERING LEVEL 2 APPLICATION FORMS AND ASSOCIATED REQUIREMENTS. CONTRACTOR RESPONSIBLE TO MEET ALL REQUIREMENTS OF THE (RMP).
a. APPROVED EXTERIOR AC DISCONNECT AND PRODUCTION METER.
b. RMP NET METER AT MAIN
c. RMP APPROVED PRODUCTION METER AND ENCLOSURE
c. NEC 2020 690.12 RAPID SHUTDOWN REQUIREMENTS

PROJECT FINAL PLANS: THE SELECTED PROPOSER/CONTRACTOR WILL BE RESPONSIBLE FOR DEVELOPING PV SYSTEM PROJECT PLANS, WHICH WILL BE SUBJECTED TO A PROCESS OF JOINT AGREEMENT, PLAN CHECKS, AND DESIGN REVIEWS INVOLVING VARIOUS STAKEHOLDERS, INCLUDING THE OWNER, THE GENERAL CONTRACTOR, THE ARCHITECT, ELECTRICAL ENGINEER, THE LOCAL AUTHORITY HAVING JURISDICTION, AND OTHER RELEVANT LOCAL PARTIES. THE FINAL DRAWINGS AND SPECIFICATIONS MUST BEAR THE STAMP AND SIGNATURE OF AN ELECTRICAL ENGINEER LICENSED IN THE STATE OF UTAH, AND ALL STRUCTURAL MOUNTING DETAILS MUST BE CERTIFIED WITH THE STAMP AND SIGNATURE OF A STRUCTURAL ENGINEER LICENSED IN THE STATE OF UTAH.

SUBMITTALS: SUBMIT SUPPORT DESIGN DOCUMENTATION WITH FINAL PLANS FOR REVIEW INCLUDING SHADE ANALYSIS, VOLTAGE DROP CALCULATIONS, ENERGY ANALYSIS, INCLUDING EFFECTS OF SHADING, AND SHOP DRAWINGS OF PROPOSED PV AND MOUNTING EQUIPMENT.

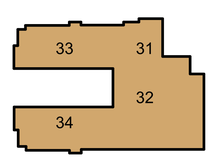
INSTALLATION OF PV SYSTEM: DIVISION 26 AND ITS SUB-CONTRACTOR ARE ENTIRELY RESPONSIBLE FOR ALL EXPENSES RELATED TO THE CONSTRUCTION OF THE PV SYSTEM, ENCOMPASSING INSURANCE COVERAGE, LABOR, MATERIALS, PERMITS, BONDING, ENGINEERING/DESIGN, TRANSPORTATION, STORAGE, AND EQUIPMENT RENTAL COSTS. THIS SHALL COVER THE COMPREHENSIVE SCOPE OF WORK REQUIRED TO BUILD THE PV SYSTEM IN STRICT COMPLIANCE WITH THE FINAL APPROVED PLANS.

OWNER PORTAL AND CENTRALIZED MONITORING SYSTEM: PROVIDE A SEAMLESS OWNER PORTAL AND A CENTRALIZED MONITORING SYSTEM FOR THIS PROJECT. THE CONTRACTOR SHALL ENSURE NETWORK CONNECTIVITY AND BMS INTEGRATION WITH ALL INVERTERS ACROSS THE ENTIRE PROJECT. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR REGISTERING AND CONFIGURING AN ONLINE PORTAL. THIS PORTAL WILL GRANT BUILDING AND PROJECT OWNERS THE ABILITY TO ACCESS COMPREHENSIVE PV AND PRODUCTION DATA FOR EVERY BUILDING AND CANOPY SYSTEM ACROSS THE SCHOOL DISTRICT. THE SYSTEM OWNERS SHOULD HAVE THE CAPACITY TO VIEW DETAILED INVERTER AND COMMUNICATION STATUSES THROUGH VARIOUS PLATFORMS, INCLUDING THEIR COMPUTERS, SMARTPHONES, AND BMS, ENABLING THEM TO INDEPENDENTLY TROUBLESHOOT AND DIAGNOSE SYSTEM ISSUES AS NEEDED.

COMMISSIONING AND ACCEPTANCE TESTING: ALL THROUGH THE START-UP, THE OWNER AND/OR ITS DESIGNATED REPRESENTATIVES SHALL BE PRESENT TO OBSERVE AND VERIFY THE SYSTEM'S PERFORMANCE, ENSURING IT MEETS THE MUTUALLY AGREED-UPON PERFORMANCE REQUIREMENTS. THE SCOPE OF REQUIRED COMMISSIONING AND ACCEPTANCE TEST SERVICES WILL ENCOMPASS, BUT NOT BE LIMITED TO:

A. INITIATING AND OVERSEEING THE PV SYSTEM'S START-UP PROCESS UNTIL IT ACHIEVES THE JOINTLY AGREED-UPON PERFORMANCE REQUIREMENTS.
B. CONDUCTING COMPREHENSIVE PERFORMANCE TESTING OVER SEVEN CONSECUTIVE CALENDAR DAYS.
C. ENSURING THE SUCCESSFUL DELIVERY OF POWER WITHIN 30 DAYS FOLLOWING THE COMPLETION OF THE SYSTEM.
D. ADDRESSING ANY OTHER SPECIFIC REQUIREMENTS AS STIPULATED BY THE OWNER, ARCHITECT, ENGINEER, OWNER, OR THE LOCAL AUTHORITY HAVING JURISDICTION."

KEY PLAN - ROOF



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CLIENT NUMBER: 23142
DATE: NOVEMBER 08 2023

BRIAN HICKS — No. 7709837-2202 — 11/15/23 — STATE OF UTAH — PROFESSIONAL ENGINEER

BNA CONSULTING
4225 Lake Park Blvd, Suite 275
West Valley City, UT 84120

P: 801.532.2196
F: 801.532.2305

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REV	DATE	DESCRIPTION
1	11/15/23	Addendum #1

OSD HILLCREST ELEMENTARY REBUILD
1130 N. ECCLES AVE., OGDEN, UT 84404
BID PACKAGE 5 - GENERAL CONSTRUCTION

ROOF PV SYSTEM ELECTRICAL PLAN

E206

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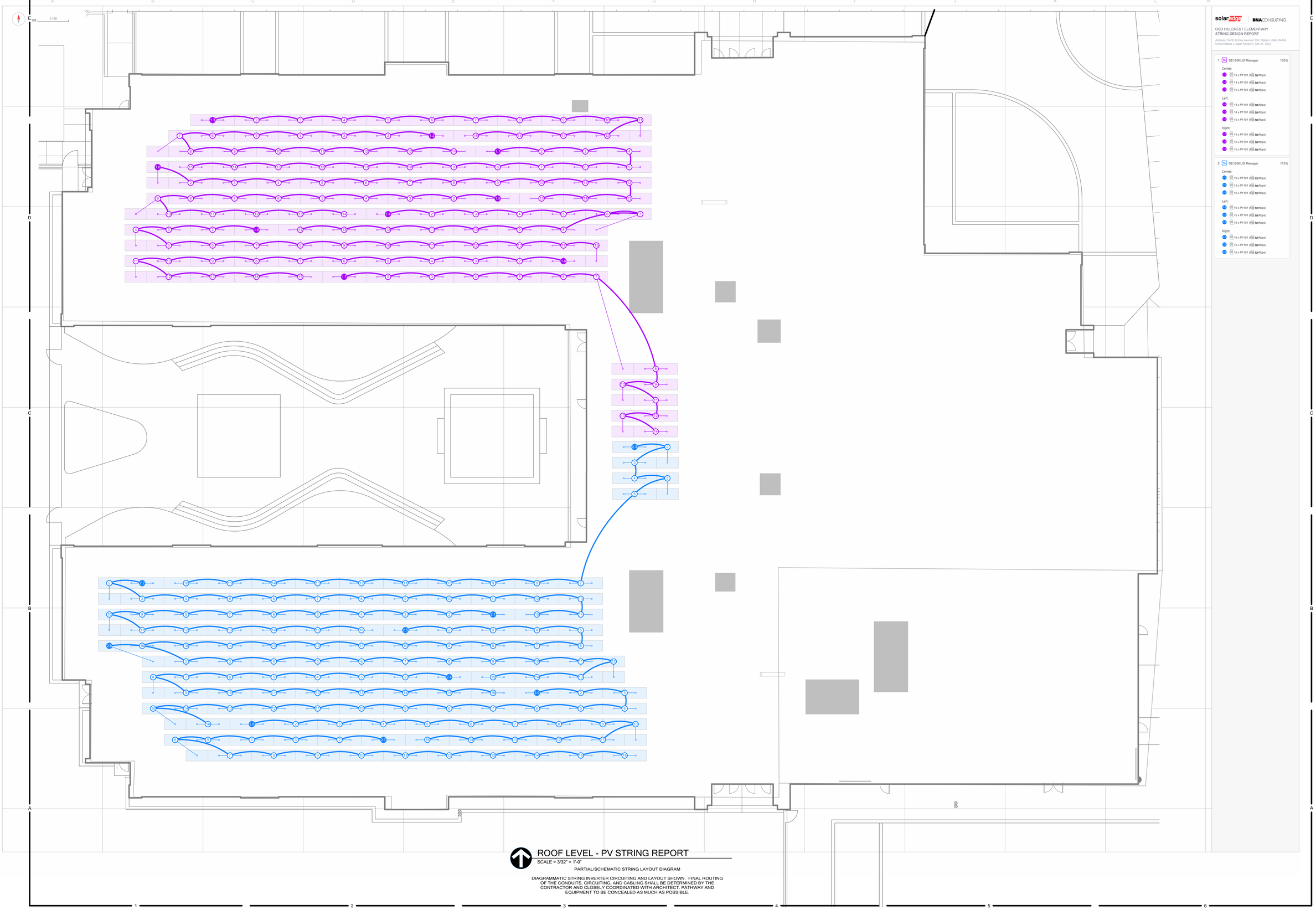

ROOF LEVEL - PV STRING REPORT

SCALE = 3/32" = 1'-0"

PARTIAL/SCHEMATIC STRING LAYOUT DIAGRAM

DIAGRAMMATIC STRING INVERTER CIRCUITING AND LAYOUT SHOWN. FINAL ROUTING OF THE CONDUITS, CIRCUITING, AND CABLING SHALL BE DETERMINED BY THE CONTRACTOR AND CLOSELY COORDINATED WITH ARCHITECT. PATHWAY AND EQUIPMENT TO BE CONCEALED AS MUCH AS POSSIBLE.

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OSD HILLCREST ELEMENTARY
STRING DESIGN REPORT

Address: North Eccles Avenue 130, Ogden, Utah, 84404, United States | Logan Murphy | Oct 31, 2023

1 SE120KUS Manager 105%

Center:
- 15 x P1101 (optimizers)
- 14 x P1101 (optimizers)
- 15 x P1101 (optimizers)

Left:
- 14 x P1101 (optimizers)
- 14 x P1101 (optimizers)
- 15 x P1101 (optimizers)

Right:
- 14 x P1101 (optimizers)
- 15 x P1101 (optimizers)
- 15 x P1101 (optimizers)

2 SE120KUS Manager 113%

Center:
- 16 x P1101 (optimizers)
- 15 x P1101 (optimizers)
- 16 x P1101 (optimizers)

Left:
- 16 x P1101 (optimizers)
- 15 x P1101 (optimizers)
- 16 x P1101 (optimizers)

Right:
- 16 x P1101 (optimizers)
- 15 x P1101 (optimizers)
- 16 x P1101 (optimizers)

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ROOF PV STRING REPORT

E207

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ROOFMOUNT | RM10

SOUTH FACING 10 DEGREE TILT

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RM10 introduced the Power of Speed & Simplicity to the ballasted flat roof solar industry. The system consists of only two major components, minimizing installation time. Quickly design around roof obstacles and bond the system with just the turn of a wrench. Optional roof attachments, roof pads, and MLPE mount provide a complete solution UNIRAC's unmatched commercial project support makes construction easy, from permitting through installation, and **RM10** is supported by North America's largest distribution network. Plus, enjoy peace of mind with UNIRAC's industry-leading 25-year warranty.

#UNIRAC 25 YEAR FULL SYSTEM WARRANTY

FEWER PARTS • FASTER INSTALLATION

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Power Optimizer

For North America

P860 / P960 / P1101

POWER OPTIMIZER

PV power optimization at the module-level
The most cost-effective solution for commercial and large field installations

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses and combiner boxes, over 2x longer string lengths possible
- Fast installation with a single bolt
- Advanced maintenance with module-level monitoring
- Module-level voltage shutdown for installer and firefighter safety
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)

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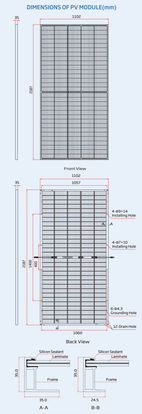
Vertex

BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE

DIMENSIONS OF PV MODULE(mm)



ELECTRICAL DATA (STC)

Peak Power Watts-P_{MAX} (Wp)*	480	485	490	495	500	505
Power Tolerance-P_{MAX} (W)	0 ~ +5					
Maximum Power Voltage-V_{MPP} (V)	42.2	42.5	42.8	43.1	43.4	43.7
Maximum Power Current-I_{MPP} (A)	11.38	11.42	11.45	11.49	11.53	11.56
Open Circuit Voltage-V_{OC} (V)	50.7	50.9	51.1	51.3	51.5	51.7
Short Circuit Current-I_{SC} (A)	11.97	12.01	12.05	12.09	12.13	12.17
Module Efficiency η_m (%)	19.9	20.1	20.3	20.5	20.7	21.0

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
*Measuring tolerance: ±3%.

Electrical characteristics with different power bin (reference to 10% irradiance ratio)

Total Equivalent power-P_{MAX} (Wp)	514	519	524	530	535	540
Maximum Power Voltage-V_{MPP} (V)	42.2	42.5	42.8	43.1	43.4	43.6
Maximum Power Current-I_{MPP} (A)	12.18	12.22	12.24	12.29	12.34	12.39
Open Circuit Voltage-V_{OC} (V)	50.7	50.9	51.1	51.3	51.5	51.7
Short Circuit Current-I_{SC} (A)	12.81	12.85	12.89	12.94	12.98	13.02
Irradiance ratio (rear/front)	10%					

Power Bifaciality:70±5%.

ELECTRICAL DATA (NOCT)

Maximum Power-P_{MAX} (Wp)	362	366	369	373	377	381
Maximum Power Voltage-V_{MPP} (V)	38.7	40.0	40.2	40.5	40.7	41.0
Maximum Power Current-I_{MPP} (A)	9.11	9.15	9.18	9.22	9.26	9.29
Open Circuit Voltage-V_{OC} (V)	47.7	47.9	48.0	48.2	48.4	48.5
Short Circuit Current-I_{SC} (A)	9.65	9.68	9.71	9.74	9.78	9.81

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	150 cells
Module Dimensions	2187×1102×35 mm (86.10×43.39×1.38 inches)
Weight	30.1 kg (66.4 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	POE/EVA
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	35mm(1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: 280/280 mm(11.02/11.02 inches) Landscape: 1400/1400 mm(55.1"/55.1" inches)
Connector	MC4 EVO2 or T5*4 Plus*

*Available in either option

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P_{MAX}	- 0.34%/°C
Temperature Coefficient of V_{OC}	- 0.25%/°C
Temperature Coefficient of I_{SC}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum SystemVoltage	1500V DC (IEC)
	1500V DC (UL)
Max Series Fuse Rating	25A*

*Recommended

WARRANTY

- 12 year Product Workmanship Warranty
- 30 year Power Warranty
- 2% first year degradation
- 0.45% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

- Modules per box: 31 pieces
- Modules per 40' container: 558 pieces

Trinasolar

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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Version number: TSM_DEG18MC.20(II)_NA_EN_2023_A

www.trinasolar.com

Three Phase Inverter with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE120KUS

INVERTERS

Powered by unique pre-commissioning process for rapid system installation

- Pre-commissioning feature for automated validation of system components and wiring during the site installation process and prior to grid connection
- Easy 2-person installation with lightweight, modular design (each inverter consists of 2 or 3 Synergy units and one Synergy Manager)
- Independent operation of each Synergy unit enables higher uptime and easy serviceability
- Built-in thermal sensors detect faulty wiring ensuring enhanced protection and safety
- Built-in arc fault protection and rapid shutdown
- Built-in PID mitigation for maximized system performance
- Monitored* and field-replaceable surge protection devices, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet or cellular communication for full system visibility

*Applicable only for DC and AC SPDs

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DATE: NOVEMBER 08 2023

PROFESSIONAL ENGINEER — BRIAN HICKS — No. 7709857-2202 — STATE OF UTAH

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SALT LAKE ST. GEORGE

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ROOF PV SYSTEM DIAGRAMS

E208

11/6/2023 7:00:27 PM

ONELINE GENERAL NOTES

1. EMERGENCY EQUIPMENT INDICATED SHALL BE SELECTIVELY COORDINATED TO 0.1 SECONDS PER SPECIFICATION SECTION 26 0573. STUDY SHALL BE SUBMITTED PRIOR TO ALL OTHER EQUIPMENT SUBMITTALS.
2. SEE PLANS FOR LOCATIONS OF PANELBOARDS, SWITCHBOARDS TRANSFER SWITCHES, BUSWAY, TRANSFORMERS DISCONNECTS, ETC. AND PROVIDE NEMA RATED ENCLOSURES AS REQUIRED.
3. SUBMIT DIMENSIONED DRAWINGS OF ALL ELECTRICAL ROOMS SHOWING ALL EQUIPMENT LOCATIONS WITHIN EACH SPACE BASED ON THE EQUIPMENT MANUFACTURER GEAR SIZES WITH ALL EQUIPMENT SHOP DRAWINGS.
4. PROVIDE AN ARC ENERGY-REDUCING MAINTENANCE SWITCH FOR ALL OVER-CURRENT PROTECTIVE DEVICES RATED 1200 AMPS OR HIGHER. REFER TO SPECIFICATION SECTION 26 2815 OVER-CURRENT PROTECTIVE DEVICES AND 240.87 OF CURRENT NATIONAL ELECTRICAL CODE (NEC).
5. PROVIDE ELECTRONIC TRIP CIRCUIT BREAKERS FOR ALL CIRCUIT BREAKERS 400 AMPS AND ABOVE. REFER TO THE OVERCURRENT PROTECTION SPECIFICATION SECTION FOR ADDITIONAL REQUIREMENTS.
6. ALL EQUIPMENT SHALL BE FULLY RATED. NO SERIES RATINGS ARE ALLOWED. REFER TO SPECIFICATION SECTIONS FOR ADDITIONAL DETAILS.
7. PROVIDE PRELIMINARY SHORT CIRCUIT STUDY SUBMITTAL PRIOR TO SUBMITTAL OF ANY ELECTRICAL EQUIPMENT. REFER TO SPECIFICATION SECTION 26 0573 PROTECTIVE DEVICE STUDY. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
8. PROVIDE A SURGE PROTECTIVE DEVICE ON EACH SWITCHBOARD AND PANELBOARD LOCATED ON THE EMERGENCY DISTRIBUTION SYSTEM. REFER TO SPECIFICATION SECTION 26 4313 SURGE-PROTECTIVE DEVICES (SPD) FOR LOCATION CATEGORY.
9. REFER TO DISTRIBUTION BOARD AND PANELBOARD SCHEDULES FOR ADDITIONAL BREAKERS AND SPD REQUIREMENTS.
10. GFPE PROTECTION OF THE MAIN BREAKER SHALL BE TESTED PRIOR TO THE RELEASE OF THE METER AND RESULTS SHALL BE SUBMITTED TO THE SCHOOL DISTRICT BUILDING OFFICIAL.
11. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
12. PROVIDE ALL REQUIRED LUG ADAPTERS, PIN REDUCERS, POLARIS LUG KITS, ETC. AS REQUIRED. PROVIDE NEC SIZED JUNCTION BOX AHEAD OF PANELBOARD/GEAR AS NEEDED TO LOCATED AND TERMINATE CONDUCTORS ON POLARIS LUG ADAPTERS (<10' FROM FINAL TERMINATION AT PANELBOARD). SIZE DOWN TO CONDUCTORS THAT FIT THE AVAILABLE LUGS AND/OR BREAKERS.

SHEET KEYNOTES

X1 REFER TO DISTRIBUTION BOARD SCHEDULES FOR ADDITIONAL BREAKERS AND SPD REQUIREMENTS.

X2 PROVIDE A PERMANENT PLAQUE ADJACENT TO THE MAIN SWITCHBOARD WITH AVAILABLE FAULT CURRENT CALCULATIONS.

X3 GFPE PROTECTION OF THE MAIN BREAKER SHALL BE TESTED PRIOR TO THE RELEASE OF THE METER AND RESULTS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE.

X4 PROVIDE AN ENERGY REDUCTION MAINTENANCE SWITCH WITH LOCAL LIT STATUS INDICATOR TO ALLOW FOR A REDUCTION OF THE INSTANTANEOUS PICKUP AND INSTANTANEOUS DELAY SETTINGS FOR USE DURING MAINTENANCE. MOUNT DEVICE IN FACE OF DEAD-FRONT. PROVIDE SWITCH OF SAME MANUFACTURER AS THE CIRCUIT BREAKER.

X6 GROUNDING SHALL BE SUPPLIED FROM THE ELEVATOR MAIN LINE DISCONNECT AND CONTROLLER TO THE UPSTREAM PANEL AND BUILDING GROUND. GROUND WIRE SHALL BE THE SAME SIZE AS PHASE WIRES TO MINIMIZE ELECTRICAL NOISE INTERFERENCE.

X8 PROVIDE A BUILDING ENERGY AND POWER METERING SYSTEM IN ACCORDANCE WITH IECC 2021. REFER TO SPECIFICATION 26 1010 AND DIAGRAM U601/E434 FOR ADDITIONAL REQUIREMENTS FOR DISTRIBUTION BOARD, PANELBOARD, AND BRANCH PANEL SUB-METERING AND PROVIDE ALL NECESSARY WIRING, INFRASTRUCTURE, INTERCONNECTION, AND EQUIPMENT AS NECESSARY FOR A COMPLETE AND WORKING SYSTEM.

X16 FEEDER UPSIZED FOR VOLTAGE DROP. PROVIDE ALL REQUIRED LUG ADAPTERS, PIN REDUCERS, POLARIS LUG KITS, ETC. AS REQUIRED. PROVIDE NEC SIZED JUNCTION BOX AHEAD OF PANELBOARD/GEAR AS NEEDED TO LOCATED AND TERMINATE CONDUCTORS ON POLARIS LUG ADAPTERS (<10' FROM FINAL TERMINATION AT PANELBOARD). SIZE DOWN TO CONDUCTORS THAT FIT THE AVAILABLE LUGS AND/OR BREAKERS.

X17 PROVIDE A SHUNT TRIP BREAKER.

ALUMINUM CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY

TRANS KVA	O.C. PROT.	TYPE COND.*	GEC (1)	MIN. Z%
30	50	36	8 CU	3
45	70	34	4 CU	3
75	125	32X	2 CU	3
112.5	175	34X	2 CU	4
150	300	350	2/0 CU	4
225	400	375	2/0 CU	4
300	600	350-2	3/0 CU	5
500	800	340-3	3/0 CU	5
750	1200	350-4	3/0 CU	5

ALUMINUM XHHW-2 CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY △ 480-208/120 Y

O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR (3) QUAN.	CONDUCTOR (3) SIZE	CONDUIT SIZE	BONDING JUMPER (2)
100	T41X-1	120	1	4	1/0	2"	8 CU
175	T44X-1	180	1	4	4/0	2-1/2"	4 CU
225	T43S-1	250	1	4	350	3"	1/0 AL
400	T42S-2	410	2	4	250	3"	1/0 AL
600	T45D-2	620	2	4	500	4"	4/0 AL
800	T44D-3	810	3	4	400	4"	4/0 AL
1200	T45D-4	1240	4	4	500	4"	250 AL
1600	T44D-6	1620	6	4	400	4"	300 AL
3000	T45D-10	3100	10	4	500	4"	750 AL

ALUMINUM CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY

TRANS KVA	O.C. PROT.	TYPE COND.*	GEC (1)	MIN. Z%
30	50	36	6 CU	3
45	70	34	2 CU	3
75	125	32X	2 CU	3
112.5	175	34X	1/0 CU	4
150	300	350	2/0 CU	4
225	400	375	2/0 CU	4
300	600	350-2	3/0 CU	5
500	800	340-3	3/0 CU	5
750	1200	350-4	3/0 CU	5

ALUMINUM XHHW-2 CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY (200% NEUTRAL) △ 480-208/120 Y

O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR (3) QUAN.	CONDUCTOR (3) SIZE	CONDUIT SIZE	BONDING JUMPER (2)
100	T52X-1	108	1	5	2/0	2-1/2"	6 CU
175	T53S-1	184	1	5	300	3"	1/0 AL
225	T55D-1	248	1	5	500	4"	1/0 AL
400	T53S-2	400	2	5	350	3"	3/0 AL
600	T53S-3	600	3	5	350	4"	4/0 AL
800	T53S-4	800	4	5	350	4"	4/0 AL
1200	T55D-6	1240	5	5	500	4"	350 AL
1600	T55D-7	1736	7	5	500	4"	500 AL
3000	T575-10	3080	10	5	750	4"	750 AL

* SEE SCHEDULE FOR CONDUIT AND WIRE SIZE

NOTES:
1. GROUNDING ELECTRODE CONDUCTOR. (NEC 250.66)
2. SUPPLY SIDE BONDING JUMPER. (NEC 250.102 (C)(1))
3. XHHW INSULATION.

ALUMINUM CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUCTOR SIZE	INSULATION	EQ. GND. COND.(AL)
31X	120	2"	3	1/0	XHHW-2	4
41X	120	2"	4	1/0	XHHW-2	4
51X	96	2"	5*	1/0	XHHW-2	4
32X	135	2"	3	2/0	XHHW-2	4
42X	135	2"	4	2/0	XHHW-2	4
52X	108	2"	5*	2/0	XHHW-2	4
33X	155	2"	3	3/0	XHHW-2	4
43X	155	2"	4	3/0	XHHW-2	4
53X	124	3"	5*	3/0	XHHW-2	4
34X	180	2"	3	4/0	XHHW-2	4
44X	180	3"	4	4/0	XHHW-2	4
54X	144	3"	5*	4/0	XHHW-2	2
325	205	2"	3	250	XHHW-2	2
425	205	3"	4	250	XHHW-2	2
525	164	3"	5*	250	XHHW-2	2
330	230	3"	3	300	XHHW-2	2
430	230	3"	4	300	XHHW-2	2
530	184	3"	5*	300	XHHW-2	2
335	250	3"	3	350	XHHW-2	2
435	250	3"	4	350	XHHW-2	2
535	200	3"	5*	350	XHHW-2	2
340	270	3"	3	400	XHHW-2	2
440	270	3"	4	400	XHHW-2	2
540	216	3"	5*	400	XHHW-2	2
350	310	4"	3	500	XHHW-2	1
450	310	4"	4	500	XHHW-2	1
550	248	4"	5*	500	XHHW-2	1
375	385	4"	3	750	XHHW-2	1
475	385	4"	4	750	XHHW-2	1
575	308	4"	5*	750	XHHW-2	1

ALUMINUM CONDUCTOR & CONDUIT SCHEDULE FOR PARALLEL RUNS

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	EQ. GND. COND.(AL)
325-2	400	410	2	3	250	2-1/2"	2/0
425-2	400	410	2	4	250	2-1/2"	2/0
535-2	400	400	2	5*	350	3"	2/0
350-2	600	620	2	3	500	3"	2/0
450-2	600	620	2	4	500	3"	2/0
535-3	600	600	3	5*	350	3"	2/0
340-3	800	810	3	3	400	2-1/2"	3/0
440-3	800	810	3	4	400	3"	3/0
535-4	800	800	4	5*	350	4"	3/0
375-3	1000	1155	3	3	750	4"	4/0
475-3	1000	1155	3	4	750	4"	4/0
535-5	1000	1000	5	5*	350	4"	4/0
350-4	1200	1240	4	3	500	4"	250
450-4	1200	1240	4	4	500	4"	250
550-5	1200	1240	5	5*	500	4"	250
340-6	1600	1620	6	3	400	4"	350
440-6	1600	1620	6	4	400	4"	350
550-7	1600	1736	7	5*	500	4"	350
475-6	2000	2310	6	4	750	4"	400
475-7	2500	2695	7	4	750	5"	600
475-8	3000	3080	8	4	750	5"	600
475-11	4000	4235	11	4	750	5"	750

NOTES:
IN PARALLEL RUNS SIZE GND. COND. IN ACCORDANCE WITH NEC PARA. 250-122.

GND. CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS

* 200% NEUTRAL. DERATED TO 80% BASED ON NEC 310.15.B(5)(C)

** COPPER CONDUCTOR (XHHW)

PROVIDE COMPACT STRANDED ALUMINUM ASSOCIATION 8000 SERIES ALLOY CONDUCTORS.

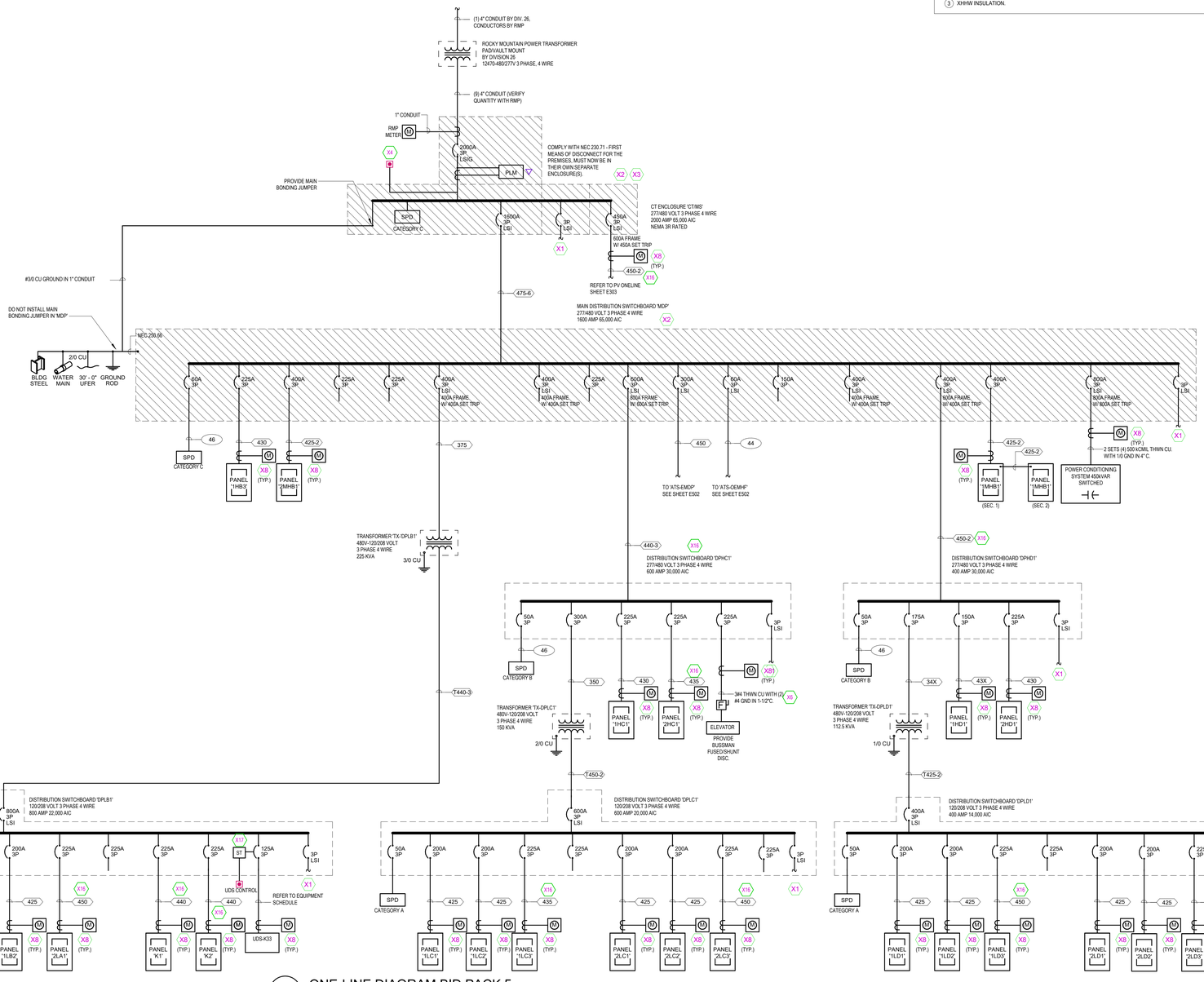
PROVIDE TERMINATION FOR ALUMINUM ALLOY CONDUCTORS OF HYDRAULIC COMPRESSION TYPE ONLY, LISTED UNDER UL 486-B, MARKED "AL7CU" FOR 75 DEGREE RATED CIRCUITS.

PROVIDE ALL ELECTRICAL EQUIPMENT WITH PROPER SIZING TO ACCOMMODATE ALUMINUM CONDUCTORS. COORDINATE WITH EQUIPMENT SUPPLIER.

COPPER CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUCTOR SIZE	INSULATION	EQ. GND. COND.(CU)
20	30	3/4"	2	10	THHN THWN	10
30	30	3/4"	3	10	THHN THWN	10
40	30	3/4"	4	10	THHN THWN	10
28	40	1"	2	8	THHN THWN	10
38	40	1"	3	8	THWN THWN	10
48	40	1"	4	8	THWN THWN	10
26	55	1"	2	6	THHN THWN	8
36	55	1"	3	6	THHN THWN	8
46	55	1"	4	6	THHN THWN	8
24	70	1"	2	4	THHN THWN	8
34	70	1-1/4"	3	4	THHN THWN	8
44	70	1-1/4"	4	4	THHN THWN	8
23	85	1-1/4"	2	3	THHN THWN	8
33	85	1-1/4"	3	3	THHN THWN	8
43	85	1-1/2"	4	3	THHN THWN	8
32	95	1-1/2"	3	2	THHN THWN	6
42	95	1-1/2"	4	2	THHN THWN	6

R&O CONSTRUCTION (CMGC) HAS PREVIOUSLY PROCURED THE CT/MS AND MDP SWITCHGEAR DUE TO PROJECT SCHEDULE CONSTRAINTS. DIVISION 26 SHALL INCLUDE WITHIN THEIR BID PACKAGE THE RECEIVING AND INSTALLATION OF THE PREVIOUSLY PROCURED CT/MS AND MDP ALONG WITH THE ENTIRETY THE REMAINING GEAR, EQUIPMENT, FEEDERS, AND THE COMPREHENSIVE INSTALLATION OF THE ENTIRE ONE-LINE AND ELECTRICAL INFRASTRUCTURE WITHIN THEIR BID. DIVISION 26 WILL SHOULDER THE RESPONSIBILITY OF BOTH RECEIVING THE ITEMS AND ENSURING THE COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEM, ALONG WITH ALL OTHER NECESSARY PREREQUISITES TO ESTABLISH A FULLY FUNCTIONAL ELECTRICAL SYSTEM



1 ONE-LINE DIAGRAM BID PACK 5

VCBO®

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SALT LAKE CITY, UT 84102
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VCBO NUMBER: 22785
CLIENT NUMBER: 23142
DATE: NOVEMBER 08 2023

BRIAN HICKS No. 7709937 PROFESSIONAL ENGINEER STATE OF UTAH

BNA CONSULTING
4225 Lake Park Blvd, Suite 275
West Valley City, UT 84120
P: 801.532.2196
F: 801.532.2305
www.bnaconsulting.com

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ONE-LINE DIAGRAM

E301

11/6/2023 7:00:29 PM

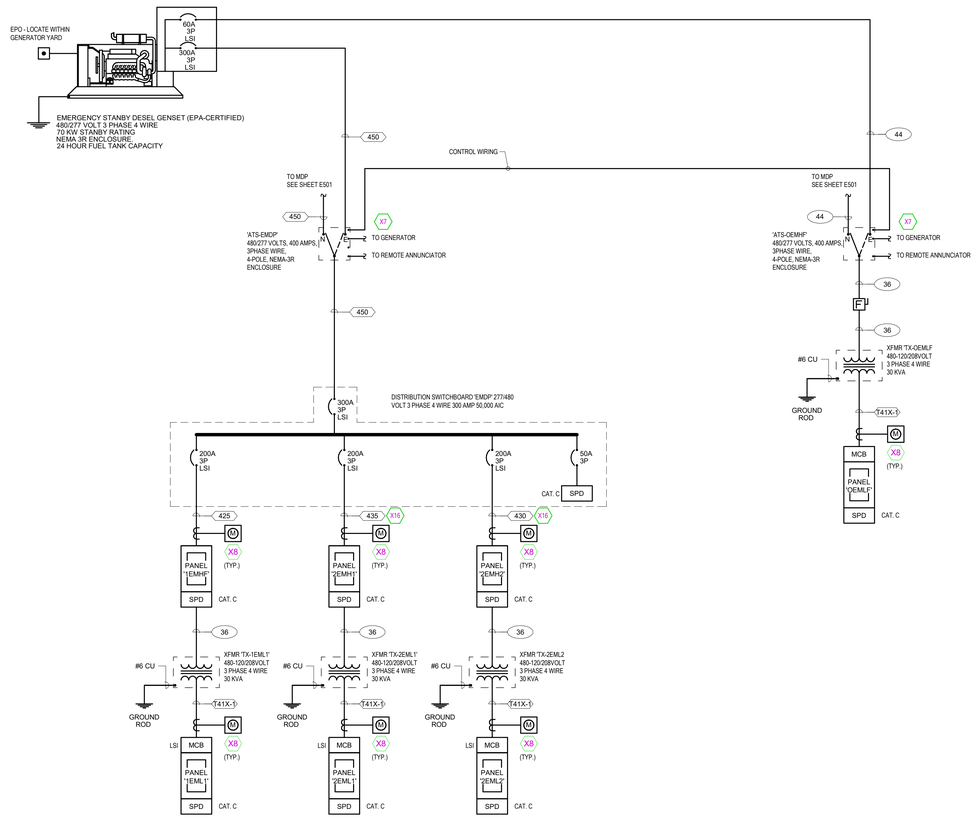
XDMRT - FAULT CURRENT SCHEDULE

DEVICE	FAULT AT DEVICE	AIC RATING	VOLTAGE	FEEDER SIZE	FEEDER LENGTH	TRANSFORMER KVA	TRANSFORMER Z%	FAULT AT PRIMARY
CT/MS	65,064		480V					
MDP	61,468		480V	(6)400kcmil AL	29'			
1HB3	40,276		480V	300kcmil AL	36'			
1MHB1	46,619		480V	(2)250kcmil AL	41'			
1MHB1	43,142		480V	(2)250kcmil AL	12'			
2MHB1	26,024		480V	(2)250kcmil AL	152'			
DPHC1	!!! 30,028 !!!	30,000	480V	(3)500kcmil AL	265'			
1HC1	24,760		480V	300kcmil AL	26'			
2HC1	21,891		480V	350kcmil AL	50'			
TX-DPLC1	17,218		480V	500kcmil AL	14'	150	2	27,694
DPLC1	16,234	20,000	208V	(2)500kcmil AL	17'			
1LC1	12,571		208V	250kcmil AL	23'			
1LC2	12,305		208V	250kcmil AL	25'			
1LC3	9,401		208V	350kcmil AL	76'			
2LC1	10,008		208V	250kcmil AL	49'			
2LC2	10,193		208V	250kcmil AL	47'			
2LC3	6,653		208V	500kcmil AL	192'			
DPHD1	!!! 31,265 !!!	30,000	480V	(2)500kcmil AL	164'			
1HD1	23,503		480V	3/0 AL	26'			
2HD1	21,612		480V	300kcmil AL	53'			
TX-DPLD1	13,480		480V	4/0 AL	12'	112.5	2	27,853
DPLD1	12,677	14,000	208V	(2)250kcmil AL	12'			
1LD1	10,044		208V	250kcmil AL	27'			
1LD2	10,198		208V	250kcmil AL	25'			
1LD3	5,795		208V	500kcmil AL	207'			
2LD1	7,739		208V	250kcmil AL	65'			
2LD2	7,841		208V	250kcmil AL	63'			
2LD3	5,564		208V	500kcmil AL	223'			
PCS	55,029		480V	(2)500kcmil	24'			
TX-DPLB1	28,150		480V	(2)250kcmil AL	16'	225	2	55,226
DPLB1	!!! 26,611 !!!	22,000	208V	(3)500kcmil AL	15'			
1LA1	7,113		208V	500kcmil AL	220'			
1LA2	7,159		208V	500kcmil AL	218'			
1LB1	18,430		208V	250kcmil AL	22'			
1LB2	15,544		208V	250kcmil AL	34'			
1MLB1	15,905		208V	300kcmil AL	38'			
2LA1	7,330		208V	500kcmil AL	211'			
K1	9,268		208V	400kcmil AL	129'			
K2	9,170		208V	400kcmil AL	131'			
RMP PV DISCONNECT	57,741		480V	(2)500kcmil AL	22'			
DPPV	27,377		480V	(2)500kcmil AL	197'			
INV-1	14,949		480V	350kcmil AL	121'			
INV-2	24,707		480V	350kcmil AL	16'			
GENSET	UTILITY		480V					
ATS-EMDP	84,886 / 46,768		480V	500kcmil AL / 500kcmil AL	56' / 28'			
EMDP	69,917		480V	500kcmil AL	12'			
1EMHF	48,395		480V	250kcmil AL	19'			
TX-1EML1	4,345		480V	#6	17'	30	1.75	20,492
1EML1	3,866		208V	1/0 AL	17'			
2EMH1	10,106		480V	350kcmil AL	322'			
TX-2EML1	3,853		480V	#6	17'	30	1.75	7,943
2EML1	3,263		208V	1/0 AL	28'			
2EMH2	14,224		480V	300kcmil AL	190'			
TX-2EML2	3,979		480V	#6	20'	30	1.75	9,750
2EML2	3,514		208V	1/0 AL	20'			
ATS-OEMHF	12,301 / 22,216		480V	#4 / #4	72' / 32'			
TX-OEMLF	4,269		480V	#4	14'	30	1.75	16,582
OEMLF	3,780		208V	1/0 AL	18'			

NOTES:
1. **REFERENCE ONLY:** THE SCHEDULE SHOWN IS FOR REFERENCE ONLY. THE CALCULATED LENGTHS AND AVAILABLE FAULT CURRENT FOR ELECTRICAL EQUIPMENT IS BASED UPON MODEL INFORMATION WITH ENGINEERING CONTRIBUTIONS. DIVISION 26 SHALL CONDUCT A PROTECTIVE DEVICE STUDY PER SPECIFICATION SECTION 26 0573 AND PROVIDE INFORMATION BASED UPON ACTUAL FIELD CONDITIONS.
2. AT TIME OF DOCUMENT PREPARATION THE UTILITY COMPANY HAD NOT CALCULATED AND PROVIDED THE AVAILABLE FAULT CURRENT AT THE SECONDARY OF THE PAD MOUNTED TRANSFORMER. BECAUSE OF THIS WE HAVE ASSUMED A WORSE CASE SCENARIO FOR THE SIZE OF THE TRANSFORMER AND ITS IMPEDANCE AND USED AN INFINITE FAULT CURRENT FOR OUR FAULT CURRENT CALCULATIONS.
3. ALL EQUIPMENT SHALL BE FULL RATED. SERIES RATING OF EQUIPMENT WILL NOT BE ACCEPTED.
4. ALL OVERCURRENT PROTECTION DEVICES SHALL HAVE A FAULT CURRENT RATING THAT IS EQUAL OR GREATER THAN THE CALCULATED RATING OF THE SWITCHGEAR AND/OR PANELBOARD.

GENERAL SHEET NOTES

1. EMERGENCY EQUIPMENT INDICATED SHALL BE SELECTIVELY COORDINATED TO 0.1 SECONDS PER SPECIFICATION SECTION 26 0573. STUDY SHALL BE SUBMITTED PRIOR TO ALL OTHER EQUIPMENT SUBMITTALS.
2. SEE PLANS FOR LOCATION OF PANELBOARDS, SWITCHBOARDS TRANSFER SWITCHES, BUSWAY, TRANSFORMERS DISCONNECTS, ETC. AND PROVIDE NEMA RATED ENCLOSURES AS REQUIRED.
3. SUBMIT DIMENSIONED DRAWINGS OF ALL ELECTRICAL ROOMS SHOWING ALL EQUIPMENT LOCSTIONS WITHIN EACH SPACE BASED ON THE EQUIPMENT MANUFACTURER GEAR SIZES WITH ALL EQUIMENT SHOP DRAWINGS.
4. PROVIDE AN ARC ENERGY-REDUCING MAINTENANCE SWITCH FOR ALL OVER-CURRENT PROTECTIVE DEVICES RATED 1200 AMPS OR HIGHER. REFER TO SPECIFICATION SECTION 26 2815 OVER-CURRENT PROTECTIVE DEVICES AND 240.87 OF CURRENT NATIONAL ELECTRICAL CODE (NEC).
5. PROVIDE ELECTRONIC TRIP CIRCUIT BREAKERS FOR ALL CIRCUIT BREAKERS 400 AMPS AND ABOVE . REFER TO THE OVERCURRENT PROTECTION SPECIFICATION SECTION FOR ADDITIONAL REQUIREMENTS.
6. ALL EQUIPMENT SHALL BE FULLY RATED. NO SERIES RATINGS ARE ALL OWED.
7. REFER TO SPECIFICATION SECTIONS FOR ADDITIONAL DETAILS.
8. PROVIDE PRELIMINARY SHORT CIRCUIT STUDY SUBMITTAL PRIOR TO SUBMITTAL OF ANY ELECTRICAL EQUIPMENT. REFER TO SPECIFICATION SECTION 26 0573 PROTECTIVE DEVICE STUDY.
9. PROVIDE A SURGE PROTECTIVE DEVICE ON EACH SWITCHBOARD AND PANELBOARD LOCATED ON THE EMERGENCY DISTRIBUTION SYSTEM. REFER TO SPECIFICATION SECTION 26 4313 SURGE-PROTECTIVE DEVICES (SPD) FOR LOCATION CATEGORY.
10. REFER TO DISTRIBUTION BOARD AND PANELBOARD SCHEDULES FOR ADDITIONAL BREAKERS AND SPD REQUIREMENTS.
11. GFPE PROTECTION OF THE MAIN BREAKER SHALL BE TESTED PRIOR TO THE RELEASE OF THE METER AND RESULTS SHALL BE SUBMITTED TO THE OGDEN SCHOOL DISTRICT BUILDING OFFICIAL.



ALUMINUM CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY

TRANS KVA	O.C. PROT.	TYPE COND.*	GEC (1)	MIN. Z%
30	50	36	8 CU	3
45	70	34	4 CU	3
75	125	32X	2 CU	3
112.5	175	34X	2 CU	4
150	300	350	2/0 CU	4
225	400	375	2/0 CU	4
300	600	350-2	3/0 CU	5
500	800	340-3	3/0 CU	5
750	1200	350-4	3/0 CU	5

ALUMINUM XHHW-2 CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY △ 480-208/120 Y

O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR (3) QUAN.	CONDUCTOR (3) SIZE	CONDUIT SIZE	BONDING JUMPER (2)
100	T41X-1	120	1	4	1/0	2"	8 CU
175	T44X-1	180	1	4	4/0	2-1/2"	4 CU
225	T43S-1	250	1	4	350	3"	1/0 AL
400	T42S-2	410	2	4	250	3"	1/0 AL
600	T45O-2	620	2	4	500	4"	4/0 AL
800	T44O-3	810	3	4	400	4"	4/0 AL
1200	T45O-4	1240	4	4	500	4"	250 AL
1600	T44O-6	1620	6	4	400	4"	300 AL
3000	T45O-10	3100	10	4	500	4"	750 AL

ALUMINUM CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY

TRANS KVA	O.C. PROT.	TYPE COND.*	GEC (1)	MIN. Z%
30	50	36	6 CU	3
45	70	34	2 CU	3
75	125	32X	2 CU	3
112.5	175	34X	1/0 CU	4
150	300	350	2/0 CU	4
225	400	375	2/0 CU	4
300	600	350-2	3/0 CU	5
500	800	340-3	3/0 CU	5
750	1200	350-4	3/0 CU	5

ALUMINUM XHHW-2 CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY (200% NEUTRAL) △480-208/120 Y

O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR (3) QUAN.	CONDUCTOR (3) SIZE	CONDUIT SIZE	BONDING JUMPER (2)
100	T52X-1	108	1	5	2/0	2-1/2"	6 CU
175	T53O-1	184	1	5	300	3"	1/0 AL
225	T55O-1	248	1	5	500	4"	1/0 AL
400	T53S-2	400	2	5	350	3"	3/0 AL
600	T53S-3	600	3	5	350	4"	4/0 AL
800	T53S-4	800	4	5	350	4"	4/0 AL
1200	T55O-5	1240	5	5	500	4"	350 AL
1600	T55O-7	1736	7	5	500	4"	500 AL
3000	T575-10	3080	10	5	750	4"	750 AL

* SEE SCHEDULE FOR CONDUIT AND WIRE SIZE

NOTES:
(1) GROUNDING ELECTRODE CONDUCTOR. (NEC 250.66)
(2) SUPPLY SIDE BONDING JUMPER. (NEC 250.102 (C)(1))
(3) XHHW INSULATION.

SHEET KEYNOTES

X7	PROVIDE INTERLOCKING OF EMERGENCY SYSTEMS PER ARTICLE 700 OF THE NEC SO THAT THERE CAN BE NO INTERCONNECTION OF POWER SOURCES.
X8	PROVIDE A BUILDING ENERGY AND POWER METERING SYSTEM IN ACCORDANCE WITH IECC 2021. REFER TO SPECIFICATION 26 1010 AND DIAGRAM U601/E434 FOR ADDITIONAL REQUIREMENTS FOR DISTRIBUTION BOARD, PANELBOARD, AND BRANCH PANEL SUB-METERING AND PROVIDE ALL NECESSARY WIRING, INFRASTRUCTURE, INTERCONNECTION, AND EQUIPMENT AS NECESSARY FOR A COMPLETE AND WORKING SYSTEM.
X16	FEEDER UPSIZED FOR VOLTAGE DROP. PROVIDE ALL REQUIRED LUG ADAPTERS, PIN REDUCERS, POLARIS LUG KITS, ETC. AS REQUIRED. PROVIDE NEC SIZED JUNCTION BOX AHEAD OF PANELBOARD/GEAR AS NEEDED TO LOCATED AND TERMINATE CONDUCTORS ON POLARIS LUG ADAPTERS (<10' FROM FINAL TERMINATION AT PANELBOARD). SIZE DOWN TO CONDUCTORS THAT FIT THE AVAILABLE LUGS AND/OR BREAKERS.

ALUMINUM CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUCTOR SIZE	INSULATION	EQ. GND. COND.(AL)
31X	120	2"	3	1/0	XHHW-2	4
41X	120	2"	4	1/0	XHHW-2	4
51X	96	2"	5*	1/0	XHHW-2	4
32X	135	2"	3	2/0	XHHW-2	4
42X	135	2"	4	2/0	XHHW-2	4
52X	108	2"	5*	2/0	XHHW-2	4
33X	155	2"	3	3/0	XHHW-2	4
43X	155	2"	4	3/0	XHHW-2	4
53X	124	3"	5*	3/0	XHHW-2	4
34X	180	2"	3	4/0	XHHW-2	4
44X	180	3"	4	4/0	XHHW-2	4
54X	144	3"	5*	4/0	XHHW-2	2
325	205	2"	3	250	XHHW-2	2
425	205	3"	4	250	XHHW-2	2
525	164	3"	5*	250	XHHW-2	2
330	230	3"	3	300	XHHW-2	2
430	230	3"	4	300	XHHW-2	2
530	184	3"	5*	300	XHHW-2	2
335	250	3"	3	350	XHHW-2	2
435	250	3"	4	350	XHHW-2	2
535	200	3"	5*	350	XHHW-2	2
340	270	3"	3	400	XHHW-2	2
440	270	3"	4	400	XHHW-2	2
540	216	3"	5*	400	XHHW-2	2
350	310	4"	3	500	XHHW-2	1
450	310	4"	4	500	XHHW-2	1
550	248	4"	5*	500	XHHW-2	1
375	385	4"	3	750	XHHW-2	1
475	385	4"	4	750	XHHW-2	1
575	308	4"	5*	750	XHHW-2	1

ALUMINUM CONDUCTOR & CONDUIT SCHEDULE FOR PARALLEL RUNS

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	EQ. GND. COND.(AL)
325-2	400	410	2	3	250	2-1/2"	2/0
425-2	400	410	2	4	250	2-1/2"	2/0
535-2	400	400	2	5*	350	3"	2/0
350-2	600	620	2	3	500	3"	2/0
450-2	600	620	2	4	500	3"	2/0
535-3	600	600	3	5*	350	3"	2/0
340-3	800	810	3	3	400	2-1/2"	3/0
440-3	800	810	3	4	400	3"	3/0
535-4	800	800	4	5*	350	4"	3/0
375-3	1000	1155	3	3	750	4"	4/0
475-3	1000	1155	3	4	750	4"	4/0
535-5	1000	1000	5	5*	350	4"	4/0
350-4	1200	1240	4	3	500	4"	250
450-4	1200	1240	4	4	500	4"	250
550-5	1200	1240	5	5*	500	4"	250
340-6	1600	1620	6	3	400	4"	350
440-6	1600	1620	6	4	400	4"	350
550-7	1600	1736	7	5*	500	4"	350
475-6	2000	2310	6	4	750	4"	400
475-7	2500	2695	7	4	750	5"	600
475-8	3000	3080	8	4	750	5"	600
475-11	4000	4235	11	4	750	5"	750

NOTES:
IN PARALLEL RUNS SIZE GND. COND. IN ACCORDANCE WITH NEC PARA. 250-122.

GND. CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS

* 200% NEUTRAL, DERATED TO 80% BASED ON NEC 310.15.B(5)(C)

** COPPER CONDUCTOR (XHHW)

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PROVIDE TERMINATION FOR ALUMINUM ALLOY CONDUCTORS OF HYDRAULIC COMPRESSION TYPE ONLY, LISTED UNDER UL 486-B, MARKED "AL7CU" FOR 75 DEGREE RATED CIRCUITS.

PROVIDE ALL ELECTRICAL EQUIPMENT WITH PROPER SIZING TO ACCOMMODATE ALUMINUM CONDUCTORS. COORDINATE WITH EQUIPMENT SUPPLIER.

COPPER CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUCTOR SIZE	INSULATION	EQ. GND. COND.(CU)
20	30	3/4"	2	10	THHN THWN	10
30	30	3/4"	3	10	THHN THWN	10
40	30	3/4"	4	10	THHN THWN	10
28	40	1"	2	8	THHN THWN	10
38	40	1"	3	8	THHN THWN	10
48	40	1"	4	8	THHN THWN	10
26	55	1"	2	6	THHN THWN	8
36	55	1"	3	6	THHN THWN	8
46	55	1"	4	6	THHN THWN	8
24	70	1"	2	4	THHN THWN	8
34	70	1-1/4"	3	4	THHN THWN	8
44	70	1-1/4"	4	4	THHN THWN	8
23	85	1-1/4"	2	3	THHN THWN	8
33	85	1-1/4"	3	3	THHN THWN	8
43	85	1-1/2"	4	3	THHN THWN	8
32	95	1-1/2"	3	2	THHN THWN	6
42	95	1-1/2"	4	2	THHN THWN	6

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VCBO NUMBER: 22785
CLIENT NUMBER: 23142
DATE: NOVEMBER 08 2023

PROFESSIONAL ENGINEER
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11/8/2023
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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

EMERGENCY ONE-LINE DIAGRAM

E302

11/8/2023 7:00:31 PM

SHEET KEYNOTES

X9 PROVIDE (1) SPARE CIRCUIT BREAKER SPACE IN PANELBOARD FOR FUTURE.

X10 PROVIDE 450A MINIMUM DISCONNECT WITHIN 10 FT OF THE ELECTRICAL UTILITY METER EQUIPMENT. SIZE FUSES PER NEC REQUIREMENTS FOR PV INSTALLATION.

X11 EQUIPMENT SIZE PER PERFORMANCE BASED DESIGN FOR PHOTOVOLTAIC SYSTEM. SIZES ARE ONLY BEING PROVIDED FOR BASIS OF DESIGN. ALL CONDUIT AND WIRE SHOULD BE VERIFIED. ALL COSTS SHOULD BE INCLUDED IN BID.

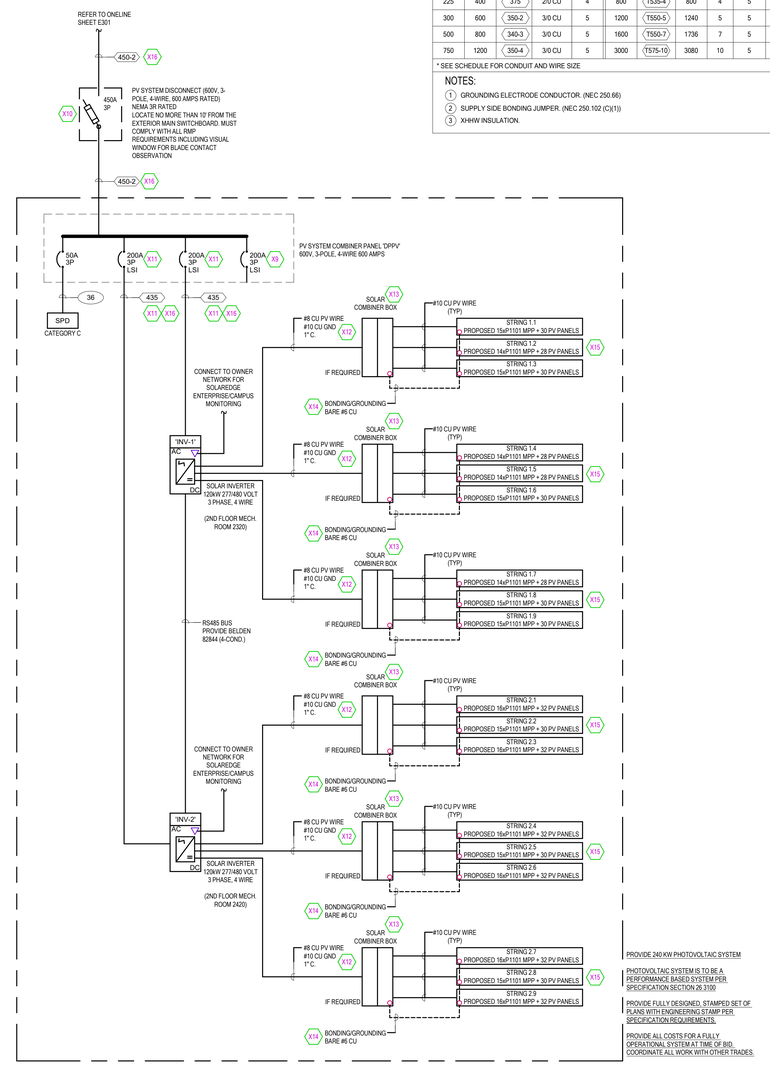
X12 PROVIDE WEATHERPROOF SOLAR TRANSITION PASS-THROUGH JUNCTION WHEREVER PV SOURCE CIRCUITS TRANSITION FROM FREE-AIR TO CONDUIT. WEATHERPROOF FITTINGS REQUIRED FOR ALL EXTERIOR INSTALLATIONS.

X13 PROVIDE WEATHERPROOF SOLAR COMBINER BOXES WITH FUSE HOLDERS WHEREVER COLLECTING MULTIPLE PV STRINGS TO COMBINE TO SINGLE CIRCUIT TO INVERTER. WEATHERPROOF FITTINGS REQUIRED FOR ALL EXTERIOR INSTALLATIONS.

X14 PROVIDE #6 BARE COPPER GROUND WIRE THROUGH EACH GROUNDING LUG. GROUNDING SHALL MEET THE REQUIREMENTS OF NEC 690.43, 690.45, AND 690.46. GROUNDING LUGS TO BE OUTDOOR RATED.

X15 DIAGRAMMATIC STRING INVERTER CIRCUITING AND LAYOUT SHOWN. FINAL ROUTING OF THE CONDUITS, CIRCUITING, AND CABLING SHALL BE DETERMINED BY THE CONTRACTOR AND CLOSELY COORDINATED WITH ARCHITECT. PATHWAY AND EQUIPMENT TO BE CONCEALED AS MUCH AS POSSIBLE.

X16 FEEDER UPSIZED FOR VOLTAGE DROP. PROVIDE ALL REQUIRED LUG ADAPTERS, PIN REDUCERS, POLARIS LUG KITS, ETC, AS REQUIRED. PROVIDE NEC SIZED JUNCTION BOX AHEAD OF PANELBOARD/GEAR AS NEEDED TO LOCATED AND TERMINATE CONDUCTORS ON POLARIS LUG ADAPTERS (+10' FROM FINAL TERMINATION AT PANELBOARD). SIZE DOWN TO CONDUCTORS THAT FIT THE AVAILABLE LUGS AND/OR BREAKERS.



PROVIDE 240 KW PHOTOVOLTAIC SYSTEM

PHOTOVOLTAIC SYSTEM IS TO BE A PERFORMANCE BASED SYSTEM PER SPECIFICATION SECTION 26 3100

PROVIDE FULLY DESIGNED, STAMPED SET OF PLANS WITH ENGINEERING STAMP PER SPECIFICATION REQUIREMENTS.

PROVIDE ALL COSTS FOR A FULLY OPERATIONAL SYSTEM AT TIME OF BID. COORDINATE ALL WORK WITH OTHER TRADES.

ALUMINUM CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY

TRANS KVA	O.C. PROT.	TYPE COND.*	GEC (1)	MIN. Z%
15	30	30	8 CU	3
30	50	36	8 CU	3
45	70	34	4 CU	3
75	125	32X	2 CU	3
112.5	175	34X	2 CU	4
150	300	350	2/0 CU	4
225	400	375	2/0 CU	4
300	600	350-2	3/0 CU	5
500	800	340-3	3/0 CU	5
750	1200	350-4	3/0 CU	5

ALUMINUM XHHW-2 CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY

△ 480-208/120 Y

O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR (3) QUAN.	CONDUCTOR (3) SIZE	CONDUIT SIZE	BONDING JUMPER (2)
60	T44-1	70	1	4	4 CU	1-1/2"	8 CU
100	T41X-1	120	1	4	1/0	2"	8 CU
175	T44X-1	180	1	4	4/0	2-1/2"	4 CU
225	T43S-1	250	1	4	350	3"	1/0 AL
400	T42S-2	410	2	4	250	3"	1/0 AL
600	T45O-2	620	2	4	500	4"	4/0 AL
800	T44O-3	810	3	4	400	4"	4/0 AL
1200	T45O-4	1240	4	4	500	4"	250 AL
1600	T44O-6	1620	6	4	400	4"	300 AL
3000	T45O-10	3100	10	4	500	4"	750 AL

ALUMINUM CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY

TRANS KVA	O.C. PROT.	TYPE COND.*	GEC (1)	MIN. Z%
15	30	30	8 CU	3
30	50	36	6 CU	3
45	70	34	2 CU	3
75	125	32X	2 CU	3
112.5	175	34X	1/0 CU	4
150	300	350	2/0 CU	4
225	400	375	2/0 CU	4
300	600	350-2	3/0 CU	5
500	800	340-3	3/0 CU	5
750	1200	350-4	3/0 CU	5

ALUMINUM XHHW-2 CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY (200% NEUTRAL) △480-208/120 Y

O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR (3) QUAN.	CONDUCTOR (3) SIZE	CONDUIT SIZE	BONDING JUMPER (2)
60	TS3-1	53	1	5	3 CU	2"	8 CU
100	TS2X-1	108	1	5	2/0	2-1/2"	6 CU
175	TS3O-1	184	1	5	300	3"	1/0 AL
225	TS5O-1	248	1	5	500	4"	1/0 AL
400	TS3S-2	400	2	5	350	3"	3/0 AL
600	TS3S-3	600	3	5	350	4"	4/0 AL
800	TS3S-4	800	4	5	350	4"	4/0 AL
1200	TS5O-5	1240	5	5	500	4"	350 AL
1600	TS5O-7	1736	7	5	500	4"	500 AL
3000	TS75-10	3080	10	5	750	4"	750 AL

* SEE SCHEDULE FOR CONDUIT AND WIRE SIZE

NOTES:
(1) GROUNDING ELECTRODE CONDUCTOR. (NEC 250.66)
(2) SUPPLY SIDE BONDING JUMPER. (NEC 250.102 (C)(1))
(3) XHHW INSULATION.

ALUMINUM CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUCTOR SIZE	INSULATION	EQ. GND. COND.(AL)
31X	120	2"	3	1/0	XHHW-2	4
41X	120	2"	4	1/0	XHHW-2	4
51X	96	2"	5*	1/0	XHHW-2	4
32X	135	2"	3	2/0	XHHW-2	4
42X	135	2"	4	2/0	XHHW-2	4
52X	108	2"	5*	2/0	XHHW-2	4
33X	155	2"	3	3/0	XHHW-2	4
43X	155	2"	4	3/0	XHHW-2	4
53X	124	3"	5*	3/0	XHHW-2	4
34X	180	2"	3	4/0	XHHW-2	4
44X	180	3"	4	4/0	XHHW-2	4
54X	144	3"	5*	4/0	XHHW-2	2
325	205	2"	3	250	XHHW-2	2
425	205	3"	4	250	XHHW-2	2
525	164	3"	5*	250	XHHW-2	2
330	230	3"	3	300	XHHW-2	2
430	230	3"	4	300	XHHW-2	2
530	184	3"	5*	300	XHHW-2	2
335	250	3"	3	350	XHHW-2	2
435	250	3"	4	350	XHHW-2	2
535	200	3"	5*	350	XHHW-2	2
340	270	3"	3	400	XHHW-2	2
440	270	3"	4	400	XHHW-2	2
540	216	3"	5*	400	XHHW-2	2
350	310	4"	3	500	XHHW-2	1
450	310	4"	4	500	XHHW-2	1
550	248	4"	5*	500	XHHW-2	1
375	385	4"	3	750	XHHW-2	1
475	385	4"	4	750	XHHW-2	1
575	308	4"	5*	750	XHHW-2	1

ALUMINUM CONDUCTOR & CONDUIT SCHEDULE FOR PARALLEL RUNS

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	EQ. GND. COND.(AL)
325-2	400	410	2	3	250	2-1/2"	2/0
425-2	400	410	2	4	250	2-1/2"	2/0
535-2	400	400	2	5*	350	3"	2/0
350-2	600	620	2	3	500	3"	2/0
450-2	600	620	2	4	500	3"	2/0
535-3	600	600	3	5*	350	3"	2/0
340-3	800	810	3	3	400	2-1/2"	3/0
440-3	800	810	3	4	400	3"	3/0
535-4	800	800	4	5*	350	4"	3/0
375-3	1000	1155	3	3	750	4"	4/0
475-3	1000	1155	3	4	750	4"	4/0
535-5	1000	1000	5	5*	350	4"	4/0
350-4	1200	1240	4	3	500	4"	250
450-4	1200	1240	4	4	500	4"	250
550-5	1200	1240	5	5*	500	4"	250
340-6	1600	1620	6	3	400	4"	350
440-6	1600	1620	6	4	400	4"	350
550-7	1600	1736	7	5*	500	4"	350
475-6	2000	2310	6	4	750	4"	400
475-7	2500	2695	7	4	750	5"	600
475-8	3000	3080	8	4	750	5"	600
475-11	4000	4235	11	4	750	5"	750

NOTES:
IN PARALLEL RUNS SIZE GND. COND. IN ACCORDANCE WITH NEC PARA. 250-122.

GND. CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS

* 200% NEUTRAL, DERATED TO 80% BASED ON NEC 310.15 B(5)(C)

** COPPER CONDUCTOR (XHHW)

PROVIDE COMPACT STRANDED ALUMINUM ASSOCIATION 8000 SERIES ALLOY CONDUCTORS.

PROVIDE TERMINATION FOR ALUMINUM ALLOY CONDUCTORS OF HYDRAULIC COMPRESSION TYPE ONLY, LISTED UNDER UL 486-B, MARKED "AL7CU" FOR 75 DEGREE RATED CIRCUITS.

PROVIDE ALL ELECTRICAL EQUIPMENT WITH PROPER SIZING TO ACCOMMODATE ALUMINUM CONDUCTORS. COORDINATE WITH EQUIPMENT SUPPLIER.

COPPER CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUCTOR SIZE	INSULATION	EQ. GND. COND.(CU)
20	30	3/4"	2	10	THHN THWN	10
30	30	3/4"	3	10	THHN THWN	10
40	30	3/4"	4	10	THHN THWN	10
28	40	1"	2	8	THHN THWN	10
38	40	1"	3	8	THHN THWN	10
48	40	1"	4	8	THHN THWN	10
26	55	1"	2	6	THHN THWN	8
36	55	1"	3	6	THHN THWN	8
46	55	1"	4	6	THHN THWN	8
24	70	1"	2	4	THHN THWN	8
34	70	1-1/4"	3	4	THHN THWN	8
44	70	1-1/4"	4	4	THHN THWN	8
23	85	1-1/4"	2	3	THHN THWN	8
33	85	1-1/4"	3	3	THHN THWN	8
43	85	1-1/2"	4	3	THHN THWN	8
32	95	1-1/2"	3	2	THHN THWN	6
42	95	1-1/2"	4	2	THHN THWN	6

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VCBO NUMBER: 22785
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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PV ONE-LINE DIAGRAM

E303

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INDEX OF PANELBOARD SCHEDULE

1LA1	1LA2	
1LB1	1LB2	1LC1
1LC2	1LC3	

PANELBOARD GENERAL NOTES

1. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
2. PROVIDE TYPED PANELBOARD INDEXES AS EACH PANELBOARD. FILL OUT PANELBOARD'S CIRCUIT DIRECTORY CARD UPON COMPLETION OF INSTALLATION WORK. UTILIZE ACTUAL FINAL BUILDING ROOM NUMBERS, NOT ARCHITECTURAL NUMBERS USED ON DRAWINGS. IDENTIFY INDIVIDUAL LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM SERVER, LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM NUMBERS AND EQUIPMENT NAMES. INCLUDE ROOM NUMBER WITH EQUIPMENT CIRCUIT DESIGNATIONS. ALL DIRECTORIES TO BE TYPEWRITTEN.
3. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
4. ALL MECHANICAL AND KITCHEN EQUIPMENT BREAKERS TO BE SIZED PER THE MECHANICAL EQUIPMENT SCHEDULE AND KITCHEN EQUIPMENT SCHEDULE.

PANELBOARD SCHEDULE

PANEL: 1LA1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: RECORDS 1107 **FED FROM:** DPLB1 **MOUNTING:** FLUSH **BUSSING:** ALUMINUM

MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT, RECEPTION 1102	20 A	1	#12	1	900 VA			4160 VA			2	#6	2	50 A	ELECTRIC RANGE, FACULTY LOUNGE-1...
RECEPT, RECEPTION 1102	20 A	1	#12	3		900 VA			4160 VA		4	--	--	--	
RECEPT, PRINCIPAL 1103	20 A	1	#12	5			720 VA			1500 VA	6	#12	1	20 A	*MICROWAVE
Other, RECEPT, PRINCIPAL 1103	20 A	1	#12	7	1220 VA				1500 VA		8	#12	1	20 A	*MICROWAVE
Other, RECEPT, CONFERENCE 1104	20 A	1	#12	9		1040 VA				1500 VA	10	#12	1	20 A	*MICROWAVE
RECEPT, ASSIST. PRINCIPAL 1106	20 A	1	#12	11			900 VA			570 VA	12	#12	1	20 A	LIGHTING, RECEPT, VESTIBULE 1118
Other, RECEPT, FACULTY LOUNGE...	20 A	1	#12	13	1400 VA						14				
RECEPT, Room 1102, 1105, 1107	20 A	1	#12	15		1080 VA			360 VA		16	#12	1	20 A	RECEPT, WORK ROOM 1112
RECEPT, Room 1108, 1109	20 A	1	#12	17			720 VA			360 VA	18	#12	1	20 A	RECEPT, WORK ROOM 1112
RECEPT, WORK ROOM 1112	20 A	1	#12	19	540 VA			500 VA			20	#12	1	20 A	VAV, RECEPTION 1102
*REFRIGERATOR, RECEPT, WORK...	25 A	1	#10	21		2040 VA			500 VA		22	#12	1	20 A	F/S DAMPERS, RECEPTION 1102
RECEPT, WELLNESS ROOM 1113	20 A	1	#12	23			900 VA			1000 VA	24	#10	1	20 A	**HEAT TRACE
RECEPT, Room 1114, 1115, 1119, 1120...	20 A	1	#12	25	900 VA						26				
*REFRIGERATOR, FACULTY LOUNGE...	20 A	1	#12	27		1500 VA			500 VA		28	#12	1	20 A	DOOR HARDWARE, VESTIBULE 1118
*ICE MACHINE, FACULTY LOUNGE...	20 A	1	#12	29			1000 VA			500 VA	30	#12	1	20 A	ADA POWER, VESTIBULE 1118
ADA POWER, MAIN CORRIDOR 1101	20 A	1	#12	31	500 VA						32				
FIRE DOOR, VESTIBULE 1118	20 A	1	#12	33		500 VA			720 VA		34	#12	1	20 A	RECEPT, RECEPTION 1102
RECEPT, CONFERENCE 1104	20 A	1	#12	35			720 VA			1176 VA	36	#12	1	20 A	EF-14
*ICE MACHINE	20 A	1	#12	37	1000 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

12620	14800	10066	TOTAL (VA)	CONNECTED LOAD TOTAL
108 A	127 A	84 A	AMPS/PHASE	37486 VA

AIC RATING: 7,113 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1LA2 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: RECORDS 1107 **FED FROM:** DPLB1 **MOUNTING:** FLUSH **BUSSING:** ALUMINUM

MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
EF-12, EF-13	20 A	1	#12	1	800 VA						2				
RECEPT, MAIN CORRIDOR 1101	20 A	1	#12	3		360 VA					4				
LIGHTING	20 A	1	#12	5			300 VA				6				
MARQUEE SIGN	30 A	1	#2	7	2400 VA						8				
MARQUEE SIGN	30 A	1	#2	9		2400 VA					10				
EF-11	20 A	1	#12	11			696 VA				12				
RECEPT, COMMUNITY ROOM 1 1122	20 A	1	#12	13	900 VA						14				
RECEPT, COMMUNITY ROOM 1-1...	20 A	1	#12	15		720 VA					16				
RECEPT, COMMUNITY ROOM 2 1123	20 A	1	#10	17			720 VA				18				
RECEPT, COMMUNITY ROOM 2 1123	20 A	1	#12	19	720 VA						20				
RECEPT, COMMUNITY ROOM 2 1122	20 A	1	#10	21		1040 VA					22				
RECEPT, COMMUNITY ROOM 1-1...	20 A	1	#10	23			1040 VA				24				
RECEPT, Room 1100, 1101	20 A	1	#12	25	860 VA						26				
**HEAT TRACE	20 A	1	#10	27		1000 VA					28				
ADA POWER, VESTIBULE 1100	20 A	1	#12	29			500 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

5680	5520	3256	TOTAL (VA)	CONNECTED LOAD TOTAL
50 A	49 A	27 A	AMPS/PHASE	14456 VA

AIC RATING: 7,159 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1LB1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1207 **FED FROM:** DPLB1 **MOUNTING:** SURFACE **BUSSING:** ___

MAINS/BUS AMPS: 200 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
BNA PWR Junction Box Free, ELEC 1207	20 A	1	#12	1	500 VA						2				
**HEAT TRACE	20 A	1	#8	3		1000 VA					4				
LIGHTING, ELEC 1207	20 A	1	#12	5			500 VA				6				
RECEPT, MULTI-PURPOSE 1200	20 A	1	#12	7	540 VA						8				
RECEPT, Room 1206A, 1207	20 A	1	#12	9		540 VA					10				
LIGHTING, ELEC 1207	20 A	1	#12	11			500 VA				12				
RECEPT, Room 1222, 1223	20 A	1	#8	13	1260 VA						14				
MOTORIZED OVERHEAD DOOR...	20 A	1	#12	15		0 VA					16				
RECEPT, Room 1221, 1222	20 A	1	#10	17			1260 VA				18				
RECEPT., Room 1219, 1220, 1221	20 A	1	#12	19	540 VA						20				
				21							22				
				23							24				
				25							26				
				27							28				
				29							30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

2840	1540	2260	TOTAL (VA)	CONNECTED LOAD TOTAL
25 A	13 A	20 A	AMPS/PHASE	5640 VA

AIC RATING: 18,430 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1LB2 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: PE STORAGE 1205 **FED FROM:** DPLB1 **MOUNTING:** SURFACE **BUSSING:** ___

MAINS/BUS AMPS: 200 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
LIGHTING, MULTI-PURPOSE 1200	20 A	1	#12	1	70 VA			500 VA			2	#12	1	20 A	DOOR HARDWARE, MULTI-PURPOSE 1200
LIGHTING, MULTI-PURPOSE 1200	20 A	1	#12	3		70 VA			180 VA		4	#12	1	20 A	RECEPT, MULTI-PURPOSE 1200
DIVIDER CURTAIN, MULTI-PURPOSE...	20 A	3	#12	5			600 VA			180 VA	6	#12	1	20 A	RECEPT, MULTI-PURPOSE 1200
--	--	--	--	7	600 VA			174 VA			8	#12	1	20 A	LIGHTING
--	--	--	--	9		600 VA			360 VA		10	#12	1	20 A	RECEPT, MUSIC ROOM 1202
RECEPT, MULTI-PURPOSE 1200	20 A	1	#12	11			540 VA			180 VA	12	#12	1	20 A	RECEPT, PE STORAGE 1205
RECEPT, MULTI-PURPOSE 1200	20 A	1	#12	13	180 VA				360 VA		14	#12	1	20 A	RECEPT, Room 1204, 1205
RECEPT., Room 1200, 1201	20 A	1	#12	15		540 VA				1000 VA	16	#12	1	20 A	Other, SERVING 1211
RECEPT., Room 1202, 1203-1	20 A	1	#12	17			1080 VA			720 VA	18	#12	1	20 A	RECEPT, MAIN CORRIDOR 1101
RECEPT, MUSIC ROOM 1202	20 A	1	#12	19	540 VA			203 VA			20	#12	1	20 A	LIGHTING
MOTORIZED SCREEN, MUSIC ROOM...	20 A	1	#12	21		500 VA			210 VA		22	#12	1	20 A	LIGHTING, RECEPT
MOTORIZED SHADE, MULTI-PURPOS...	20 A	1	#12	23			300 VA				24				
MOTORIZED SHADE, MULTI-PURPOS...	20 A	1	#12	25	300 VA						26				
FIRE DOOR, MULTI-PURPOSE 1200	20 A	1	#12	27		500 VA					28				
FIRE DOOR, MULTI-PURPOSE 1200	20 A	1	#12	29			500 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

2889	3953	4100	TOTAL (VA)	CONNECTED LOAD TOTAL
24 A	34 A	36 A	AMPS/PHASE	10938 VA

AIC RATING: 15,544 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1LC1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1333 **FED FROM:** DPLC1 **MOUNTING:** SURFACE **BUSSING:** ___

MAINS/BUS AMPS: 200 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT, CORRIDOR 1300	20 A	1	#12	1	540 VA						2	#12	1	20 A	*WASHING MACHINE
RECEPT, CORRIDOR 1300	20 A	1	#12	3		540 VA			540 VA		4	#12	1	20 A	RECEPT., Room 1309, 1310
RECEPT, STORAGE 1309	20 A	1	#12	5			180 VA			900 VA	6	#12	1	20 A	RECEPT., Room 1331, 1334
Other	20 A	1	#12	7	720 VA			900 VA			8	#12	1	20 A	RECEPT, SITE TECH OFFICE 1331
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	9		900 VA			900 VA		10	#12	1	20 A	RECEPT, Room 1301, 1330, 1331
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	11			680 VA			1000 VA	12	#12	1	20 A	HEAT TRACE
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	13	720 VA				630 VA		14	#12	1	20 A	LIGHTING, RECEPT
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	15		360 VA				420 VA	16	#12	1	20 A	LIGHTING, RECEPT
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	17			720 VA			500 VA	18	#12	1	20 A	FIRE DOOR, CORRIDOR 1300
RECEPT., THINK TANK 1307	20 A	1	#12	19	1220 VA				360 VA		20	#12	1	20 A	RECEPT, MAIN CORRIDOR 1101
LIGHTING, RECEPT	20 A	1	#12	21		210 VA				500 VA	22	#12	1	20 A	VAV, STUDENT COLLABORATION 1300A
LIGHTING, RECEPT	20 A	1	#12	23			210 VA			500 VA	24	#12	1	20 A	F/S DAMPERS, STUDENT COLLABORATI...
*DRYER, STORAGE 1309	30 A	2	#10	25	2184 VA				360 VA		26	#12	1	20 A	RECEPT., CORRIDOR 1300
--	--	--	--	27		2184 VA				180 VA	28	#12	1	20 A	MOTORIZED LIFT
Other, RECEPT, MAIN CORRIDOR 1101	20 A	1	#12	29			680 VA			500 VA	30	#12	1	20 A	LIGHTING, ELEC 1333
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

9034	6734	5870	TOTAL (VA)	CONNECTED LOAD TOTAL
76 A	57 A	49 A	AMPS/PHASE	20418 VA

AIC RATING: 12,571 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1LC2 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1333 **FED FROM:** DPLC1 **MOUNTING:** SURFACE **BUSSING:** ___

MAINS/BUS AMPS: 200 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
LASER CUTTER	20 A	1	#12	1	1080 VA			500 VA			2	#12	1	20 A	RECEPT
3D PRINTER	20 A	1	#12	3		1080 VA			500 VA		4	#12	1	20 A	RECEPT
3D PRINTER, STEAM LAB 1336	20 A	1	#12	5			1080 VA			500 VA	6	#12	1	20 A	RECEPT
3D PRINTER, STEAM LAB 1336	20 A	1	#12	7	1080 VA						8				
3D PRINTER, STEAM LAB 1336	20 A	1	#12	9		1080 VA					10				
RECEPT	20 A	1	#12	11			500 VA				12				
CIRCUIT 'a', RECEPT, Room 1305, 1306	20 A	1	#12	13	900 VA						14				
CIRCUIT 'b', PRE-SCHOOL...	20 A	1	#12	15		1080 VA					16				
CIRCUIT 'c', PRE-SCHOOL...	20 A	1	#12	17			1080 VA				18				
CIRCUIT 'a', RECEPT, Room 1302, 1303	20 A	1	#12	19	900 VA			720 VA			20	#12	1	20 A	RECEPT, STEAM LAB 1336
CIRCUIT 'b', PRE-SCHOOL...	20 A	1	#12	21		1080 VA			720 VA		22	#12	1	20 A	RECEPT, STEAM LAB 1336
CIRCUIT 'c', PRE-SCHOOL...	20 A	1	#12	23			1080 VA			540 VA	24	#12	1	20 A	RECEPT, STEAM LAB 1336
CIRCUIT 'a', FUNCTIONAL SKILLS 1308	20 A	1	#12	25	720 VA			360 VA			26	#12	1	20 A	RECEPT, STORAGE 1304
CIRCUIT 'b', FUNCTIONAL SKILLS 1308	20 A	1	#12	27		1080 VA					28				
CIRCUIT 'c', FUNCTIONAL SKILLS 1308	20 A	1	#12	29			1080 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

6260	6620	5860	TOTAL (VA)	CONNECTED LOAD TOTAL
53 A	56 A	49 A	AMPS/PHASE	18740 VA

AIC RATING: 12,305 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1LC3 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: STORAGE 1314 **FED FROM:** DPLC1 **MOUNTING:** FLUSH **BUSSING:** ALUMINUM

MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
VAV, STUDENT COLLABORATION...	20 A	1	#12	1	500 VA			1260 VA			2	#10	1	20 A	CIRCUIT 'c', RECEPT, Room 1320, 1321
F/S DAMPERS, STUDENT...	20 A	1	#12	3		500 VA			500 VA		4	#12	1	20 A	RECEPT., CORRIDOR 1300
DOOR HARDWARE, CORRIDOR 1300	20 A	1	#12	5			500 VA			540 VA	6	#12	1	20 A	RECEPT., CORRIDOR 1300
RECEPT, THINK TANK 1325	20 A	1	#12	7	540 VA			360 VA			8	#12	1	20 A	RECEPT, STORAGE 1314
Other, RECEPT, THINK TANK 1325	20 A	1	#10	9		860 VA			900 VA		10	#12	1	20 A	CIRCUIT 'a', RECEPT, Room 1315, 1316
CIRCUIT 'a', RECEPT, Room 1323, 1324	20 A	1	#12	11			900 VA			1080 VA	12	#10	1	20 A	CIRCUIT 'b', KINDERGARTEN CLASSROO...
CIRCUIT 'b', KINDERGARTEN...	20 A	1	#10	13	1080 VA			1080 VA			14	#10	1	20 A	CIRCUIT 'c', KINDERGARTEN CLASSROO...
CIRCUIT 'c', KINDERGARTEN...	20 A	1	#10	15		1080 VA			720 VA		16	#12	1	20 A	CIRCUIT 'a', RESOURCE CLASSROOM 1312
RECEPT., Room 1321, 1322	20 A	1	#12	17			180 VA			1080 VA	18	#12	1	20 A	CIRCUIT 'b', RESOURCE CLASSROOM 1312
CIRCUIT 'a', RECEPT, Room 1318, 1319	20 A	1	#10	19	900 VA			1080 VA			20	#12	1	20 A	CIRCUIT 'c', RESOURCE CLASSROOM 1312
CIRCUIT 'b', KINDERGARTEN...	20 A	1	#10	21		1080 VA			1000 VA		22	#12	1	20 A	**HEAT TRACE
CIRCUIT 'c', KINDERGARTEN...	20 A	1	#10	23			1080 VA				24				
RECEPT, STORAGE 1317	20 A	1	#12	25	360 VA						26				
CIRCUIT 'a', KINDERGARTEN...	20 A	1	#12	27		720 VA					28				
CIRCUIT 'b', KINDERGARTEN...	20 A	1	#10	29			1080 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

7160	7360	6440	TOTAL (VA)	CONNECTED LOAD TOTAL
61 A	62 A	54 A	AMPS/PHASE	20960 VA

AIC RATING: 9,401 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PANELBOARD SCHEDULES

E311

11/6/2023 7:00:34 PM

INDEX OF PANELBOARD SCHEDULE

1LD1	1LD2	1LD3
2LA1	K1	K2

PANELBOARD GENERAL NOTES

1. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS, FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
2. PROVIDE TYPED PANELBOARD INDEXES AS EACH PANELBOARD. FILL OUT PANELBOARD'S CIRCUIT DIRECTORY CARD UPON COMPLETION OF INSTALLATION WORK. UTILIZE ACTUAL FINAL BUILDING ROOM NUMBERS, NOT ARCHITECTURAL NUMBERS USED ON DRAWINGS. IDENTIFY INDIVIDUAL LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM SERVER, LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM NUMBERS AND EQUIPMENT NAMES. INCLUDE ROOM NUMBER WITH EQUIPMENT CIRCUIT DESIGNATIONS. ALL DIRECTORIES TO BE TYPEWRITTEN.
3. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
4. ALL MECHANICAL AND KITCHEN EQUIPMENT BREAKERS TO BE SIZED PER THE MECHANICAL EQUIPMENT SCHEDULE AND KITCHEN EQUIPMENT SCHEDULE.

PANELBOARD SCHEDULE

PANEL: 1LD1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1421 **FED FROM:** DPLD1 **MOUNTING:** SURFACE **BUSSING:**
MAINS/BUS AMPS: 200 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO
LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT	20 A	1	#12	1	500 VA						2	#12	1	20 A	DOOR HARDWARE, MAIN CORRIDOR 1101
RECEPT	20 A	1	#12	3		500 VA				1000 VA	4	#12	1	20 A	**HEAT TRACE
RECEPT, THINK TANK 1404	20 A	1	#12	5			860 VA				6	#12	1	20 A	Other
RECEPT, CORRIDOR 1400	20 A	1	#12	7	360 VA						8				
RECEPT, Room 1423, 1424, 1425, 1427	20 A	1	#12	9		720 VA					10				
RECEPT	20 A	1	#12	11			500 VA				12				
RECEPT	20 A	1	#12	13	500 VA						14				
RECEPT, STEAM LAB 1426	20 A	1	#12	15		720 VA					16				
FIRE DOOR, CORRIDOR 1400	20 A	1	#12	17			500 VA				18				
LIGHTING, RECEPT	20 A	1	#10	19	210 VA						20				
RECEPT, STEAM LAB 1426	20 A	1	#12	21		720 VA					22				
VAV, STUDENT COLLABORATION...	20 A	1	#12	23			500 VA				24				
F/S DAMPERS, STUDENT...	20 A	1	#12	25	500 VA						26				
RECEPT, STEAM LAB 1426	20 A	1	#12	27		540 VA					28				
RECEPT, CORRIDOR 1400	20 A	1	#12	29			540 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

2570	4200	3620	TOTAL (VA)	CONNECTED LOAD TOTAL
21 A	36 A	32 A	AMPS/PHASE	9670 VA

AIC RATING: 10,044 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1LD2 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1421 **FED FROM:** DPLD1 **MOUNTING:** SURFACE **BUSSING:**
MAINS/BUS AMPS: 200 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO
LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT, MAIN CORRIDOR 1101	20 A	1	#12	1	360 VA			720 VA			2	#12	1	20 A	CIRCUIT 'b', CLASSROOM 1401
LIGHTING, RECEPT	20 A	1	#12	3		630 VA			1080 VA		4	#12	1	20 A	CIRCUIT 'b', CLASSROOM 1401
LIGHTING, RECEPT	20 A	1	#12	5			420 VA			1080 VA	6	#12	1	20 A	CIRCUIT 'c', CLASSROOM 1401
CIRCUIT 'a', CLASSROOM 1415	20 A	1	#12	7	720 VA			720 VA			8	#12	1	20 A	CIRCUIT 'a', CLASSROOM 1403
CIRCUIT 'b', CLASSROOM 1415	20 A	1	#10	9		1080 VA			1080 VA		10	#12	1	20 A	CIRCUIT 'b', CLASSROOM 1403
CIRCUIT 'c', CLASSROOM 1415	20 A	1	#10	11			1080 VA			1080 VA	12	#12	1	20 A	CIRCUIT 'c', CLASSROOM 1403
CIRCUIT 'a', CLASSROOM 1407	20 A	1	#12	13	720 VA			720 VA			14	#12	1	20 A	CIRCUIT 'a', CLASSROOM 1412
CIRCUIT 'b', CLASSROOM 1407	20 A	1	#12	15		1080 VA			1080 VA		16	#10	1	20 A	CIRCUIT 'b', CLASSROOM 1412
CIRCUIT 'c', CLASSROOM 1407	20 A	1	#12	17			1080 VA			1080 VA	18	#10	1	20 A	CIRCUIT 'c', CLASSROOM 1412
CIRCUIT 'c', CLASSROOM 1405	20 A	1	#12	19	720 VA						20				
CIRCUIT 'b', CLASSROOM 1405	20 A	1	#12	21		1080 VA					22				
CIRCUIT 'c', CLASSROOM 1405	20 A	1	#12	23			1080 VA				24				
RECEPT, THINK TANK 1404	20 A	1	#12	25	540 VA			360 VA			26	#12	1	20 A	RECEPT, CORRIDOR 1400
VAV	20 A	1	#12	27		500 VA			696 VA		28	#12	1	20 A	EF-17
F/S DAMPERS	20 A	1	#12	29			500 VA			696 VA	30	#12	1	20 A	EF-18
				31							32				
				33							34				
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA						38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

5580	8306	8096	TOTAL (VA)	CONNECTED LOAD TOTAL
47 A	72 A	71 A	AMPS/PHASE	21982 VA

AIC RATING: 10,198 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1LD3 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: STORAGE 1416 **FED FROM:** DPLD1 **MOUNTING:** FLUSH **BUSSING:** ALUMINUM
MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO
LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
EXT. CAMERA MEDIA CONVERTER	20 A	1	#12	1	500 VA			1080 VA			2	#12	1	20 A	CIRCUIT 'c', CLASSROOM 1414
Other, RECEPT, THINK TANK 1418	20 A	1	#12	3		860 VA			500 VA		4	#12	1	20 A	DOOR HARDWARE, CORRIDOR 1400
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	5			360 VA			500 VA	6	#12	1	20 A	F/S DAMPERS, STUDENT COLLABORATI...
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	7	360 VA			500 VA			8	#12	1	20 A	VAV, STUDENT COLLABORATION 1400A
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	9		360 VA			360 VA		10	#12	1	20 A	RECEPT, CORRIDOR 1400
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	11			360 VA			1000 VA	12	#12	1	20 A	**HEAT TRACE
RECEPT, TEACHER COLLABORATIO...	20 A	1	#10	13	720 VA			720 VA			14	#12	1	20 A	RECEPT, Room 1409, 1410, 1410A, 1411
Other, RECEPT, TEACHER...	20 A	1	#8	15		1220 VA					16				
RECEPT, THINK TANK 1418	20 A	1	#12	17			540 VA				18				
RECEPT, CORRIDOR 1400	20 A	1	#12	19	720 VA						20				
CIRCUIT 'a', CLASSROOM 1417	20 A	1	#10	21		720 VA					22				
CIRCUIT 'b', CLASSROOM 1417	20 A	1	#10	23			1080 VA				24				
CIRCUIT 'c', CLASSROOM 1417	20 A	1	#10	25	1080 VA						26				
CIRCUIT 'a', CLASSROOM 1414	20 A	1	#10	27		720 VA					28				
CIRCUIT 'b', CLASSROOM 1414	20 A	1	#10	29			1080 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

5680	4740	4920	TOTAL (VA)	CONNECTED LOAD TOTAL
48 A	40 A	41 A	AMPS/PHASE	15340 VA

AIC RATING: 5,795 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2LA1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 1922 **FED FROM:** DPLB1 **MOUNTING:** SURFACE **BUSSING:**
MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO
LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT, Room 2108, 2113	20 A	1	#12	1	900 VA			1040 VA			2	#12	1	20 A	Other, RECEPT, BEHAVIORAL SPECIALIS...
RECEPT, RESOURCE CLASSROOM...	20 A	1	#12	3		1080 VA			180 VA		4	#12	1	20 A	RECEPT, MECHANICAL 1922
RECEPT, CORRIDOR 2104	20 A	1	#12	5			540 VA				6				
RECEPT, INSTRUCTIONAL COACH...	20 A	1	#12	7	900 VA			720 VA			8	#12	1	20 A	RECEPT, COUNSELING GROUP 2110
RECEPT, INSTRUCTIONAL COACH...	20 A	1	#12	9		900 VA			500 VA		10	#12	1	20 A	AHU INTERNAL LIGHTS/POWER,...
RECEPT, COUNSELOR 2107	20 A	1	#12	11			900 VA			500 VA	12	#12	1	20 A	BNA PWR Junction Box Free, MECHANICA...
RECEPT, COUNSELOR 2109	20 A	1	#12	13	900 VA					500 VA	14	#12	1	20 A	HVAC, MECHANICAL 1922
RECEPT, MECHANICAL 1922	20 A	1	#12	15		540 VA			500 VA		16	#12	1	20 A	F/S DAMPERS, CORRIDOR 2104
EF-10	20 A	1	#12	17			400 VA			500 VA	18	#12	1	20 A	VAV, CORRIDOR 2104
RECEPT, Space 1158	20 A	1	#12	19	860 VA						20				
RECEPT, Space 1203	20 A	1	#12	21		540 VA					22				
RECEPT, BEHAVIORAL SPECIALIST...	20 A	1	#12	23			900 VA				24				
Other, RECEPT, SLP/SLT GROUP...	20 A	1	#12	25	1220 VA						26				
RECEPT, RESOURCE CLASSROOM...	20 A	1	#12	27		900 VA					28				
Other, RECEPT, RESOURCE...	20 A	1	#12	29			1580 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

7040	5140	5320	TOTAL (VA)	CONNECTED LOAD TOTAL
59 A	43 A	45 A	AMPS/PHASE	17140 VA

AIC RATING: 7,330 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: K1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: JAN 1215 **FED FROM:** DPLB1 **MOUNTING:** SURFACE **BUSSING:**
MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO
LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
EF-3	20 A	1	#12	1	696 VA			1200 VA			2	#12	1	20 A	K-28
K-13	20 A	1	#12	3		1200 VA			2400 VA		4	#10	1	25 A	K-19
RECEPT, Room 1200, 1211	20 A	1	#12	5			540 VA			811 VA	6	#12	2	20 A	*K-38
RECEPT, Room 1213, 1218	20 A	1	#12	7	540 VA			811 VA			8	--	--	--	--
K-23	20 A	1	#12	9		1200 VA			180 VA		10	#12	1	20 A	REC
BNA PWR Junction Box Free, Room...	20 A	1	#12	11			360 VA			1500 VA	12	#12	1	20 A	K-32A
				13				10075...			14	1/0	3	150 A	K-56B
				15					10075...		16	--	--	--	--
*WASHING MACHINE	20 A	1	#12	17			1400 VA			10075...	18	--	--	--	--
K-22	30 A	1	#10	19	2124 VA			811 VA			20	#12	2	20 A	*K-38
K-39	20 A	1	#12	21		1272 VA			811 VA		22	--	--	--	--
K-41	20 A	1	#12	23			1200 VA			2500 VA	24	#10	2	30 A	*DRYER
K-29	20 A	1	#12	25	800 VA			2500 VA			26	--	--	--	--
K-13	20 A	1	#12	27		1200 VA					28				
K-39	20 A	1	#12	29			1272 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

19558	18339	19659	TOTAL (VA)	CONNECTED LOAD TOTAL
165 A	153 A	165 A	AMPS/PHASE	57555 VA

AIC RATING: 9,268 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: K2 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: JAN 1215 **FED FROM:** DPLB1 **MOUNTING:** SURFACE **BUSSING:**
MAINS/BUS AMPS: 225 **MAIN DISC. TYPE:** MLO **MAIN DISC. TRIP:** MLO
LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
EF-2	20 A	1	#12	1	696 VA			1200 VA			2	#12	1	20 A	K-17
K-44	40 A	1	#8	3		2844 VA			1200 VA		4	#12	1	20 A	K-17
K-23	20 A	1	#12	5			1200 VA			1200 VA	6	#12	1	20 A	K-17
K-41	20 A	1	#12	7	1200 VA			901 VA			8	#12	3	20 A	K-53
K-56A	90 A	3	#2	9		6605 VA			901 VA		10	--	--	--	--
--	--	--	--	11			6605 VA			901 VA	12	--	--	--	--
--	--	--	--	13	6605 VA				2844 VA		14	#8	1	40 A	K-44
K-23	20 A	1	#12	15		1200 VA				648 VA	16	#12	1	20 A	K-47
K-27	30 A	1	#10	17			2292 VA			1704 VA	18	#12	1	20 A	K-9
K-47	20 A	1	#12	19	648 VA			901 VA			20	#12	3	20 A	K-83
K-26	20 A	1	#12	21		1140 VA			901 VA		22	--	--	--	--
RECEPT, RECEIVING 1222	20 A	1	#12	23			180 VA			901 VA	24	--	--	--	--
				25				--			26	--	1	--	SPACE ONLY
SPARE	20 A	1	--	27		0 VA			--		28	--	1	--	SPACE ONLY
SPARE	20 A	1	--	29			0 VA			--	30	--	1	--	SPACE ONLY
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

14994	15438	14982	TOTAL (VA)	CONNECTED LOAD TOTAL
125 A	129 A	125 A	AMPS/PHASE	45415 VA

AIC RATING: 9,170 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

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BID PACKAGE 5 - GENERAL CONSTRUCTION

PANELBOARD SCHEDULES

E312

11/6/2023 7:00:36 PM

INDEX OF PANELBOARD SCHEDULE

2LC1	2LC2	2LD3
2LC3	2LD1	2LD2

PANELBOARD GENERAL NOTES

1. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS, FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
2. PROVIDE TYPED PANELBOARD INDEXES AS EACH PANELBOARD. FILL OUT PANELBOARD'S CIRCUIT DIRECTORY CARD UPON COMPLETION OF INSTALLATION WORK. UTILIZE ACTUAL FINAL BUILDING ROOM NUMBERS, NOT ARCHITECTURAL NUMBERS USED ON DRAWINGS. IDENTIFY INDIVIDUAL LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM SERVER, LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM NUMBERS AND EQUIPMENT NAMES. INCLUDE ROOM NUMBER WITH EQUIPMENT CIRCUIT DESIGNATIONS. ALL DIRECTORIES TO BE TYPEWRITTEN.
3. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
4. ALL MECHANICAL AND KITCHEN EQUIPMENT BREAKERS TO BE SIZED PER THE MECHANICAL EQUIPMENT SCHEDULE AND KITCHEN EQUIPMENT SCHEDULE.

PANELBOARD SCHEDULE

PANEL: 2LC1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2320
FED FROM: DPLC1
MOUNTING: SURFACE
BUSSING:

MAINS/BUS AMPS: 200
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT	20 A	1	#12	1	180 VA			380 VA			2	#12	1	20 A	EF-7
				3					1165 VA		4	#12	2	20 A	AC-1
RECEPT, CORRIDOR 2300	20 A	1	#12	5			500 VA			1165 VA	6	--	--	--	
RECEPT, CORRIDOR 2300	20 A	1	#12	7	540 VA				500 VA		8	#12	1	20 A	AHU INTERNAL LIGHTS/POWER...
RECEPT, THINK TANK 2304	20 A	1	#12	9		540 VA		500 VA			10	#12	1	20 A	*TP-1
				11						540 VA	12	#12	1	20 A	RECEPT, MEDIA CENTER 2322
				13							14				
Other, RECEPT, THINK TANK 2304	20 A	1	#12	15		860 VA					16				
RECEPT, CONFERENCE 2100	20 A	1	#12	17			720 VA				18				
Other, RECEPT, CONFERENCE 2100	20 A	1	#10	19	1040 VA						20				
F/S DAMPERS, CORRIDOR 2300	20 A	1	#12	21		500 VA					22				
VAV, CORRIDOR 2300	20 A	1	#12	23			500 VA				24				
				25							26				
EF-6	20 A	1	#12	27		696 VA					28				
EF-16	20 A	1	#12	29			400 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

2640	4261	3825	TOTAL (VA)
22 A	37 A	33 A	AMPS/PHASE

CONNECTED LOAD TOTAL 10726 VA

AIC RATING: 10,008 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2LC2 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2320
FED FROM: DPLC1
MOUNTING: SURFACE
BUSSING:

MAINS/BUS AMPS: 200
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	1	360 VA			720 VA			2	#12	1	20 A	CIRCUIT 'a', CLASSROOM 2305
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	3		360 VA			1080 VA		4	#12	1	20 A	CIRCUIT 'b', CLASSROOM 2305
Other, RECEPT, TEACHER...	20 A	1	#10	5			1220 VA			1080 VA	6	#12	1	20 A	CIRCUIT 'c', CLASSROOM 2305
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	7	720 VA			720 VA			8	#12	1	20 A	CIRCUIT 'a', CLASSROOM 2307
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	9		360 VA			1080 VA		10	#12	1	20 A	CIRCUIT 'b', CLASSROOM 2307
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	11			360 VA			1080 VA	12	#12	1	20 A	CIRCUIT 'c', CLASSROOM 2307
CIRCUIT 'a', CLASSROOM 2303	20 A	1	#12	13	720 VA						14				
CIRCUIT 'b', CLASSROOM 2303	20 A	1	#12	15		1080 VA					16				
CIRCUIT 'c', CLASSROOM 2303	20 A	1	#12	17			1080 VA				18				
CIRCUIT 'a', CLASSROOM 2301	20 A	1	#12	19	720 VA						20				
CIRCUIT 'b', CLASSROOM 2301	20 A	1	#12	21		1080 VA					22				
CIRCUIT 'c', CLASSROOM 2301	20 A	1	#12	23			1080 VA				24				
FIRE DOOR, Space 1203	20 A	1	#12	25	500 VA			180 VA			26	#12	1	20 A	RECEPT, MECHANICAL 2320
Other	20 A	1	#12	27		720 VA			500 VA		28	#12	1	20 A	LIGHTING, MECHANICAL 2320
				29						500 VA	30	#12	1	20 A	BNA PWR Junction Box Free
				31				0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

4640	6260	6400	TOTAL (VA)
39 A	54 A	55 A	AMPS/PHASE

CONNECTED LOAD TOTAL 16080 VA

AIC RATING: 10,193 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2LD3 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: STORAGE 2416
FED FROM: DPLD1
MOUNTING: FLUSH
BUSSING: ALUMINUM

MAINS/BUS AMPS: 225
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
F/S DAMPERS, STUDENT...	20 A	1	#12	1	500 VA			1080 VA			2	#10	1	20 A	CIRCUIT 'c', CLASSROOM 2415
VAV, STUDENT COLLABORATION...	20 A	1	#12	3		500 VA			720 VA		4	#12	1	20 A	RECEPT, Room 2409, 2410, 2410A, 2411
EF-3	20 A	1	#12	5			696 VA				6				
CIRCUIT 'a', CLASSROOM 2417	20 A	1	#10	7	720 VA						8				
CIRCUIT 'b', CLASSROOM 2417	20 A	1	#10	9		1080 VA					10				
CIRCUIT 'c', CLASSROOM 2417	20 A	1	#10	11			1080 VA				12				
RECEPT, THINK TANK 2418	20 A	1	#10	13	860 VA						14				
RECEPT, CORRIDOR 2400	20 A	1	#12	15		500 VA					16				
RECEPT, THINK TANK 2418	20 A	1	#12	17			540 VA				18				
RECEPT, CORRIDOR 2400	20 A	1	#12	19	540 VA						20				
CIRCUIT 'a', CLASSROOM 2414	20 A	1	#10	21		720 VA					22				
CIRCUIT 'b', CLASSROOM 2414	20 A	1	#10	23			1080 VA				24				
CIRCUIT 'a', CLASSROOM 2414	20 A	1	#10	25	1080 VA						26				
CIRCUIT 'a', CLASSROOM 2415	20 A	1	#12	27		720 VA					28				
CIRCUIT 'b', CLASSROOM 2415	20 A	1	#10	29			1080 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

4780	4240	4476	TOTAL (VA)
40 A	35 A	38 A	AMPS/PHASE

CONNECTED LOAD TOTAL 13496 VA

AIC RATING: 5,564 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2LC3 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: STORAGE 2316
FED FROM: DPLC1
MOUNTING: FLUSH
BUSSING: ALUMINUM

MAINS/BUS AMPS: 225
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT, Room 2309, 2310, 2311	20 A	1	#12	1	720 VA					1080 VA	2	#10	1	20 A	CIRCUIT 'c', CLASSROOM 2314
EF-19	20 A	1	#12	3		400 VA			500 VA		4	#12	1	20 A	RECEPT, CORRIDOR 2300
				5						580 VA	6	#12	1	20 A	EF-9
				7				720 VA			8	#12	1	20 A	CIRCUIT 'a', CLASSROOM 2315
				9					1080 VA		10	#10	1	20 A	CIRCUIT 'b', CLASSROOM 2315
				11						1080 VA	12	#10	1	20 A	CIRCUIT 'c', CLASSROOM 2315
RECEPT, CORRIDOR 2300	20 A	1	#12	13	360 VA			500 VA			14	#12	1	20 A	F/S DAMPERS, STUDENT COLLABORATI...
RECEPT, THINK TANK 2318	20 A	1	#10	15		1040 VA			500 VA		16	#12	1	20 A	VAV, STUDENT COLLABORATION 2306A
RECEPT, THINK TANK 2318	20 A	1	#12	17			360 VA			720 VA	18	#12	1	20 A	CIRCUIT 'a', CLASSROOM 2312
CIRCUIT 'a', CLASSROOM 2317	20 A	1	#10	19	720 VA			1080 VA			20	#10	1	20 A	CIRCUIT 'b', CLASSROOM 2312
CIRCUIT 'b', CLASSROOM 2317	20 A	1	#10	21		1080 VA			1080 VA		22	#10	1	20 A	CIRCUIT 'c', CLASSROOM 2312
CIRCUIT 'c', CLASSROOM 2317	20 A	1	#10	23			1080 VA				24				
RECEPT, CORRIDOR 2300	20 A	1	#12	25	720 VA						26				
CIRCUIT 'a', CLASSROOM 2314	20 A	1	#10	27		720 VA					28				
CIRCUIT 'b', CLASSROOM 2314	20 A	1	#10	29			1080 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

5900	6400	4900	TOTAL (VA)
50 A	55 A	41 A	AMPS/PHASE

CONNECTED LOAD TOTAL 17200 VA

AIC RATING: 6,653 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2LD1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2420
FED FROM: DPLD1
MOUNTING: SURFACE
BUSSING:

MAINS/BUS AMPS: 200
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT, WORK ROOM 2323	20 A	1	#12	1	540 VA			1080 VA			2	#12	1	20 A	RECEPT, MEDIA CENTER 2322
				3					360 VA		4	#12	1	20 A	RECEPT, MEDIA CENTER 2322
				5						360 VA	6	#12	1	20 A	RECEPT, MEDIA CENTER 2322
RECEPT, CORRIDOR 2400	20 A	1	#12	7	540 VA			540 VA			8	#12	1	20 A	RECEPT, MEDIA CENTER 2322
RECEPT, CORRIDOR 2400	20 A	1	#12	9		500 VA			500 VA		10	#12	1	20 A	VAV, STUDENT COLLABORATION 2400A
RECEPT, THINK TANK 2404	20 A	1	#12	11			720 VA			500 VA	12	#12	1	20 A	F/S DAMPERS, STUDENT COLLABORATI...
Other, RECEPT, THINK TANK 2404	20 A	1	#12	13	860 VA					500 VA	14	#12	1	20 A	AHU INTERNAL LIGHTS/POWER...
				15					1165 VA		16	#12	2	20 A	HVAC, MECHANICAL 2420
RECEPT, Space 1203	20 A	1	#12	17			720 VA			1165 VA	18	--	--	--	
HVAC, RECEPT, WORK ROOM 2323	20 A	1	#12	19	640 VA				500 VA		20	#12	1	20 A	BNA PWR Junction Box Free
RECEPT, WORK ROOM 2323	20 A	1	#12	21		360 VA					22				
RECEPT, WORK ROOM 2323	20 A	1	#12	23			360 VA				24				
RECEPT, WORK ROOM 2323	20 A	1	#12	25	360 VA						26				
RECEPT, Room 2322, 2324	20 A	1	#12	27		720 VA					28				
RECEPT, MEDIA CENTER 2322	20 A	1	#12	29			540 VA				30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

5560	3605	4365	TOTAL (VA)
47 A	30 A	37 A	AMPS/PHASE

CONNECTED LOAD TOTAL 13530 VA

AIC RATING: 7,739 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2LD2 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2420
FED FROM: DPLD1
MOUNTING: SURFACE
BUSSING:

MAINS/BUS AMPS: 200
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO

LUGS: Standard
X DOOR-IN-DOOR
___ 200% NEUTRAL
___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT, CORRIDOR 2400	20 A	1	#12	1	360 VA			720 VA			2	#12	1	20 A	CIRCUIT 'a', CLASSROOM 2403
RECEPT	20 A	1	#12	3		360 VA			1080 VA		4	#12	1	20 A	CIRCUIT 'b', CLASSROOM 2403
Other	20 A	1	#12	5			720 VA			1080 VA	6	#12	1	20 A	CIRCUIT 'c', CLASSROOM 2403
RECEPT	20 A	1	#12	7	180 VA			720 VA			8	#12	1	20 A	CIRCUIT 'a', CLASSROOM 2412
			9					1080 VA		10	#10	1	20 A	CIRCUIT 'b', CLASSROOM 2412	
				11						1080 VA	12	#10	1	20 A	CIRCUIT 'c', CLASSROOM 2412
CIRCUIT 'a', CLASSROOM 2407	20 A	1	#12	13	720 VA						14				
CIRCUIT 'b', CLASSROOM 2407	20 A	1	#12	15		1080 VA					16				
CIRCUIT 'c', CLASSROOM 2407	20 A	1	#12	17			1080 VA				18				
CIRCUIT 'a', CLASSROOM 2405	20 A	1	#12	19	720 VA			500 VA			20	#12	1	20 A	FIRE DOOR, Space 1203
CIRCUIT 'b', CLASSROOM 2405	20 A	1	#12	21		1080 VA			680 VA		22	#12	1	20 A	Other, RECEPT, TEACHER...
CIRCUIT 'c', CLASSROOM 2405	20 A	1	#12	23			1080 VA			360 VA	24	#12	1	20 A	RECEPT, TEACHER COLLABORATION 2408
CIRCUIT 'a', CLASSROOM 2401	20 A	1	#12	25	720 VA			360 VA			26	#12	1	20 A	RECEPT, TEACHER COLLABORATION 2408
CIRCUIT 'b', CLASSROOM 2401	20 A	1	#12	27		1080 VA			360 VA		28	#12	1	20 A	RECEPT, TEACHER COLLABORATION 2408
CIRCUIT 'c', CLASSROOM 2401	20 A	1	#12	29			1080 VA			540 VA	30	#12	1	20 A	RECEPT, TEACHER COLLABORATION 2408
RECEPT, TEACHER COLLABORATIO...	20 A	1	#12	31	720 VA			180 VA			32	#12	1	20 A	RECEPT, MECHANICAL 2420
LIGHTING, MECHANICAL 2420	20 A	1	#12	33		500 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE

5900	7300	7020	TOTAL (VA)
49 A	62 A	60 A	AMPS/PHASE

CONNECTED LOAD TOTAL 19000 VA

AIC RATING: 7,841 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PANELBOARD SCHEDULES

E313

11/6/2023 7:00:37 PM

INDEX OF PANELBOARD SCHEDULE

1HB3	1HD1	1EMHF
2HC1	2HD1	2MHB1
		OEMLF

PANELBOARD GENERAL NOTES

1. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
2. PROVIDE TYPED PANELBOARD INDEXES AS EACH PANELBOARD. FILL OUT PANELBOARD'S CIRCUIT DIRECTORY CARD UPON COMPLETION OF INSTALLATION WORK. UTILIZE ACTUAL FINAL BUILDING ROOM NUMBERS, NOT ARCHITECTURAL NUMBERS USED ON DRAWINGS. IDENTIFY INDIVIDUAL LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM SERVER, LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM NUMBERS AND EQUIPMENT NAMES. INCLUDE ROOM NUMBER WITH EQUIPMENT CIRCUIT DESIGNATIONS. ALL DIRECTORIES TO BE TYPEWRITTEN.
3. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
4. ALL MECHANICAL AND KITCHEN EQUIPMENT BREAKERS TO BE SIZED PER THE MECHANICAL EQUIPMENT SCHEDULE AND KITCHEN EQUIPMENT SCHEDULE.

PANELBOARD SCHEDULE

PANEL: 1HB3 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1207 **MAINS/BUS AMPS:** 225 **LUGS:** Standard
FED FROM: MDP **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
LIGHTING, Other, Room 1211, 1213,...	20 A	1	#12	1	2569 VA			--			2	--	1	--	SPACE ONLY
LIGHTING, Other, AFTER SCHOOL...	20 A	1	#12	3		1130 VA			--		4	--	1	--	SPACE ONLY
LIGHTING, YARD 1206A	20 A	1	#12	5			210 VA			--	6	--	1	--	SPACE ONLY
				7				--			8	--	1	--	SPACE ONLY
				9					--		10	--	1	--	SPACE ONLY
				11						--	12	--	1	--	SPACE ONLY
				13				--			14	--	1	--	SPACE ONLY
				15					--		16	--	1	--	SPACE ONLY
				17						--	18	--	1	--	SPACE ONLY
				19				--			20	--	1	--	SPACE ONLY
				21					--		22	--	1	--	SPACE ONLY
				23						--	24	--	1	--	SPACE ONLY
				25				--			26	--	1	--	SPACE ONLY
				27					--		28	--	1	--	SPACE ONLY
				29						--	30	--	1	--	SPACE ONLY
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					2569	1130	210	TOTAL (VA)							CONNECTED LOAD TOTAL
					10 A	5 A	1 A	AMPS/PHASE							3909 VA

AIC RATING: 40,276 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1HD1 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1421 **MAINS/BUS AMPS:** 150 **LUGS:** Standard
FED FROM: DPHD1 **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
LIGHTING, Other, Room 1400, 1400A	20 A	1	#12	1	982 VA						2				
				3							4				
				5							6				
EF-1	20 A	3	#12	7	942 VA						8				
--	--	--	--	9		942 VA					10				
--	--	--	--	11			942 VA				12				
Other, MAIN CORRIDOR 1101	20 A	1	#12	13	1008 VA						14				
EUH-1	20 A	3	#12	15		1667 VA					16				
				17			1667 VA				18				
--	--	--	--	19	1667 VA						20				
				21							22				
				23							24				
				25							26				
				27							28				
				29							30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					4599	2609	2609	TOTAL (VA)							CONNECTED LOAD TOTAL
					17 A	9 A	9 A	AMPS/PHASE							9817 VA

AIC RATING: 23,503 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1EMHF **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1207 **MAINS/BUS AMPS:** 200 **LUGS:** Standard
FED FROM: EMDP **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
X SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
TX-1EML1	50 A	3	#6	1	2160 VA						2				
--	--	--	--	3		900 VA					4				
--	--	--	--	5			2220 VA				6				
				7							8				
				9							10				
				11							12				
				13							14				
				15							16				
				17							18				
				19							20				
				21							22				
				23							24				
				25							26				
				27							28				
				29							30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					2160	900	2220	TOTAL (VA)							CONNECTED LOAD TOTAL
					8 A	3 A	9 A	AMPS/PHASE							3780 VA

AIC RATING: 48,395 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2HC1 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2320 **MAINS/BUS AMPS:** 225 **LUGS:** Standard
FED FROM: DPHC1 **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
AHU-1	150 A	3	1/0	1	26604...						2				
--	--	--	--	3		26604...					4				
--	--	--	--	5			26604...				6				
AHU-4	25 A	3	#10	7	3880 VA						8				
--	--	--	--	9		3880 VA					10				
--	--	--	--	11			3880 VA				12				
CU-1	30 A	3	#10	13	4656 VA						14				
--	--	--	--	15		4656 VA					16				
--	--	--	--	17			4656 VA				18				
				19							20				
				21							22				
				23							24				
				25							26				
				27							28				
				29							30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					35140	35140	35140	TOTAL (VA)							CONNECTED LOAD TOTAL
					127 A	127 A	127 A	AMPS/PHASE							105420 VA

AIC RATING: 21,891 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2HD1 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2420 **MAINS/BUS AMPS:** 225 **LUGS:** Standard
FED FROM: DPHD1 **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
LIGHTING, Other, Room 2323, 2324,...	20 A	1	#12	1	1966 VA						2				
LIGHTING, Other, Room 511, 2400,...	20 A	1	#12	3		2194 VA					4				
AHU-3	150 A	3	1/0	5			26604...				6				
	--	--	--	7	26604...						8				
--	--	--	--	9		26604...					10				
Other, Room 2401, 2402, 2403, 2408,...	20 A	1	#12	11			1821 VA				12				
LIGHTING, MULTI-PURPOSE 1200	20 A	1	#12	13	2280 VA						14				
LIGHTING, MEDIA CENTER 2322	20 A	1	#12	15		1121 VA					16				
				17							18				
				19							20				
				21							22				
				23							24				
				25							26				
				27							28				
				29							30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					30850	29920	28425	TOTAL (VA)							CONNECTED LOAD TOTAL
					112 A	109 A	103 A	AMPS/PHASE							89195 VA

AIC RATING: 21,612 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2MHB1 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2200 **MAINS/BUS AMPS:** 400 **LUGS:** Standard
FED FROM: MDP **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
AHU-2	60 A	3	#4	1	11085...						2				
--	--	--	--	3		11085...					4				
--	--	--	--	5			11085...				6				
				7							8				
				9							10				
				11							12				
				13							14				
				15							16				
				17							18				
				19							20				
				21							22				
				23							24				
				25							26				
				27							28				
				29							30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					11085	11085	11085	TOTAL (VA)							CONNECTED LOAD TOTAL
					40 A	40 A	40 A	AMPS/PHASE							33255 VA

AIC RATING: 26,024 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: OEMLF **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1207 **MAINS/BUS AMPS:** 100 **LUGS:** Standard
FED FROM: TX-OEMLF **MAIN DISC. TYPE:** MCB X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** 100 ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
X SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
GAS METER DISCONNECT	20 A	1	#12	1	360 VA			1477 VA			2	#12	3	20 A	K-4A
K-3A	20 A	1	#12	3		275 VA			1477 VA		4	--	--	--	--
K-3B	20 A	1	#12	5			211 VA			1477 VA	6	--	--	--	--
K-4B/C	20 A	2	#12	7	1123 VA			1129 VA			8	#12	3	20 A	K-5A
--	--	--	--	9		1123 VA			1129 VA		10	--	--	--	--
K-4D/E	20 A	1	#12	11			600 VA			1129 VA	12	--	--	--	--
K-5B/C	20 A	1	#12	13	432 VA						14				
SPARE	20 A	1	--	15		0 VA			0 VA		16	--	1	20 A	SPARE
SPARE	20 A	1	--	17			0 VA			0 VA	18	--	1	20 A	SPARE
SPARE	20 A	1	--	19	0 VA			0 VA			20	--	1	20 A	SPARE
SPARE	20 A	1	--	21		0 VA			0 VA		22	--	1	20 A	SPARE
SPARE	20 A	1	--	23			0 VA			0 VA	24	--	1	20 A	SPARE
					4521	4004	3417	TOTAL (VA)							CONNECTED LOAD TOTAL
					38 A	34 A	28 A	AMPS/PHASE							11942 VA

AIC RATING: 3,780 **AMPS RMS SYSM.**

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PANELBOARD SCHEDULES

E314

11/6/2023 7:00:39 PM

INDEX OF PANELBOARD SCHEDULE

1HC1	1MHB1	1MHB1 (SEC. 2)
2EMH1	2EML1	1MLB1
2EML2	1EML1	2EMH2

PANELBOARD GENERAL NOTES

1. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
2. PROVIDE TYPED PANELBOARD INDEXES AS EACH PANELBOARD. FILL OUT PANELBOARD'S CIRCUIT DIRECTORY CARD UPON COMPLETION OF INSTALLATION WORK. UTILIZE ACTUAL FINAL BUILDING ROOM NUMBERS, NOT ARCHITECTURAL NUMBERS USED ON DRAWINGS. IDENTIFY INDIVIDUAL LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM SERVER, LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM NUMBERS AND EQUIPMENT NAMES. INCLUDE ROOM NUMBER WITH EQUIPMENT CIRCUIT DESIGNATIONS. ALL DIRECTORIES TO BE TYPEWRITTEN.
3. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
4. ALL MECHANICAL AND KITCHEN EQUIPMENT BREAKERS TO BE SIZED PER THE MECHANICAL EQUIPMENT SCHEDULE AND KITCHEN EQUIPMENT SCHEDULE.

PANELBOARD SCHEDULE

PANEL: 1HC1 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1333 **MAINS/BUS AMPS:** 225 **LUGS:** Feed Through
FED FROM: DPHC1 **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
Other, Room 1100, 1101, 1118	20 A	1	#12	1	908 VA			170 VA			2	#12	1	20 A	LIGHTING
LIGHTING, Other, Room 1102, 1103,...	20 A	1	#12	3		1751 VA			765 VA		4	#12	1	20 A	LIGHTING
LIGHTING, Other, Room 1307, 1308,...	20 A	1	#12	5			2101 VA			425 VA	6	#12	1	20 A	LIGHTING
LIGHTING, Other, Room 1404, 1405,...	20 A	1	#12	7	2618 VA						8				
LIGHTING, Other, Room 1300, 1300A	20 A	1	#12	9		982 VA					10				
LIGHTING, Other, Room 2305, 2306,...	20 A	1	#12	11			1681 VA				12				
LIGHTING, Other, Room 1203, 2300,...	20 A	1	#12	13	1855 VA						14				
LIGHTING, Other, Room 2108, 2110,...	20 A	1	#12	15		1782 VA					16				
EUH-1	15 A	3	#12	17			1667 VA				18				
--	--	--	--	19	1667 VA						20				
--	--	--	--	21		1667 VA					22				
LIGHTING	20 A	1	#12	23			342 VA				24				
LIGHTING, Other, STEAM LAB 1336	20 A	1	#12	25	415 VA						26				
Other, Room 1302, 1304, 1306, 1311,...	20 A	1	#12	27		1704 VA					28				
Other, Room 1401, 1402, 1403, 1408,...	20 A	1	#12	29			1821 VA				30				
Other, Room 2301, 2302, 2303, 2308,...	20 A	1	#12	31	1821 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					9453	8650	8037	TOTAL (VA)							CONNECTED LOAD TOTAL
					34 A	32 A	29 A	AMPS/PHASE							26140 VA

AIC RATING: 24,760 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1MHB1 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 1206 **MAINS/BUS AMPS:** 400 **LUGS:** Standard
FED FROM: MDP **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RT-1	20 A	3	#12	1	2882 VA			3880 VA			2	#10	3	25 A	P-5
--	--	--	--	3		2882 VA			3880 VA		4	--	--	--	--
--	--	--	--	5			2882 VA			3880 VA	6	--	--	--	--
RT-2	15 A	3	#12	7	2439 VA			1386 VA			8	#12	3	15 A	B-1
--	--	--	--	9		2439 VA			1386 VA		10	--	--	--	--
--	--	--	--	11			2439 VA			1386 VA	12	--	--	--	--
MAU-2	15 A	3	#12	13	1618 VA			831 VA			14	#12	3	15 A	P-1
--	--	--	--	15		1618 VA			831 VA		16	--	--	--	--
--	--	--	--	17			1618 VA			831 VA	18	--	--	--	--
1MHB1	400 A	3	(2)250...	19	18124...			831 VA			20	#12	3	15 A	P-2
--	--	--	--	21		18124...			831 VA		22	--	--	--	--
--	--	--	--	23			18124...			831 VA	24	--	--	--	--
P-6	25 A	3	#10	25	3880 VA			1386 VA			26	#12	3	15 A	B-2
--	--	--	--	27		3880 VA			1386 VA		28	--	--	--	--
--	--	--	--	29			3880 VA			1386 VA	30	--	--	--	--
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					37257	37257	37257	TOTAL (VA)							CONNECTED LOAD TOTAL
					135 A	135 A	135 A	AMPS/PHASE							111771 VA

AIC RATING: 46,619 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1MHB1 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 1206 **MAINS/BUS AMPS:** 400 **LUGS:** Standard
FED FROM: 1MHB1 **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
P-3	25 A	3	#10	43	3880 VA				--		44	--	1	--	SPACE ONLY
--	--	--	--	45		3880 VA				--	46	--	1	--	SPACE ONLY
--	--	--	--	47			3880 VA			--	48	--	1	--	SPACE ONLY
P-4	25 A	3	#10	49	3880 VA			--			50	--	1	--	SPACE ONLY
--	--	--	--	51		3880 VA			--		52	--	1	--	SPACE ONLY
--	--	--	--	53			3880 VA			--	54	--	1	--	SPACE ONLY
CTF-1	15 A	3	#12	55	942 VA			--			56	--	1	--	SPACE ONLY
--	--	--	--	57		942 VA			--		58	--	1	--	SPACE ONLY
--	--	--	--	59			942 VA			--	60	--	1	--	SPACE ONLY
CT-1	60 A	3	#4	61	9422 VA			--			62	--	1	--	SPACE ONLY
--	--	--	--	63		9422 VA			--		64	--	1	--	SPACE ONLY
--	--	--	--	65			9422 VA			--	66	--	1	--	SPACE ONLY
SPARE	20 A	1	--	67	0 VA			0 VA			68	--	1	20 A	SPARE
SPARE	20 A	1	--	69		0 VA			0 VA		70	--	1	20 A	SPARE
SPARE	20 A	1	--	71			0 VA			0 VA	72	--	1	20 A	SPARE
SPARE	20 A	1	--	73	0 VA			0 VA			74	--	1	20 A	SPARE
SPARE	20 A	1	--	75		0 VA			0 VA		76	--	1	20 A	SPARE
SPARE	20 A	1	--	77			0 VA			0 VA	78	--	1	20 A	SPARE
SPARE	20 A	1	--	79	0 VA			0 VA			80	--	1	20 A	SPARE
SPARE	20 A	1	--	81		0 VA			0 VA		82	--	1	20 A	SPARE
SPARE	20 A	1	--	83			0 VA			0 VA	84	--	1	20 A	SPARE
					18124	18124	18124	TOTAL (VA)							CONNECTED LOAD TOTAL
					65 A	65 A	65 A	AMPS/PHASE							54373 VA

AIC RATING: 43,142 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2EMH1 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2320 **MAINS/BUS AMPS:** 200 **LUGS:** Standard
FED FROM: EMDP **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
X SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
LIGHTING, Other, Room 1100, 1101,...	20 A	1	#12	1	688 VA			60 VA			2	#12	1	20 A	LIGHTING
LIGHTING, Other, Room 1101, 1103,...	20 A	1	#12	3		2054 VA					4				
LIGHTING, Other, Room 1101, 1300,...	20 A	1	#12	5			456 VA				6				
LIGHTING, Other, Room 1302, 1303,...	20 A	1	#12	7	1090 VA						8				
LIGHTING, Room 1100, 1101, 1105,...	20 A	1	#12	9		73 VA					10				
LIGHTING, Other, Room 1922, 2110,...	20 A	1	#12	11			2585 VA				12				
LIGHTING, Other, Room 1203, 1326-2,...	20 A	1	#12	13	1139 VA						14				
LIGHTING, Room 1203, 2104, 2300,...	20 A	1	#12	15		50 VA					16				
TX-2EML1	50 A	3	#6	17			1360 VA				18				
--	--	--	--	19	540 VA						20				
--	--	--	--	21		3400 VA					22				
LIGHTING	20 A	1	#12	23			275 VA				24				
LIGHTING	20 A	1	#12	25	160 VA						26				
LIGHTING	20 A	1	#12	27		48 VA					28				
LIGHTING	20 A	1	#12	29			78 VA				30				
LIGHTING	20 A	1	#12	31	224 VA						32				
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					3901	5625	4754	TOTAL (VA)							CONNECTED LOAD TOTAL
					14 A	21 A	18 A	AMPS/PHASE							10780 VA

AIC RATING: 10,106 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2EML1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2320 **MAINS/BUS AMPS:** 100 **LUGS:** Standard
FED FROM: TX-2EML1 **MAIN DISC. TYPE:** MCB LSI X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** 100 ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
X SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
FIRE ALARM, TELECOM 1332	20 A	1	#12	1	1000 VA						2				
				3							4				
FIRE ALARM, Other, TELECOM 1332	30 A	1	#10	5			2500 VA				6				
RECEPT, MECHANICAL 2320	20 A	1	#12	7	180 VA						8				
RECEPT, TELECOM 1332	20 A	1	#12	9			360 VA				10				
RECEPT, TELECOM 1332	20 A	1	#12	11				540 VA			12				
RECEPT, TELECOM 1332	20 A	1	#12	13	180 VA						14				
RECEPT, TELECOM 1332	20 A	1	#12	15			180 VA				16				
RECEPT, ELEC 1333	20 A	1	#12	17				360 VA			18				
				19							20				
				21							22				
				23							24				
				25							26				
				27							28				
				29							30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					1360	540	3400	TOTAL (VA)							CONNECTED LOAD TOTAL
					12 A	5 A	29 A	AMPS/PHASE							1800 VA

AIC RATING: 3,263 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1MLB1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 1206 **MAINS/BUS AMPS:** 225 **LUGS:** Standard
FED FROM: DPLB1 **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
___ SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
RECEPT, CHAIR/TABLE STORAGE 1210	20 A	1	#12	1	180 VA			180 VA			2	#12	1	20 A	RECEPT, MECHANICAL 1206
EF-8	15 A	1	#12	3		400 VA			1200 VA		4	#12	1	20 A	WH-1
*DOCK LEVELER	20 A	1	#12	5			180 VA			2880 VA	6	#10	1	30 A	WLC-1
*DOCK LEVELER	20 A	3	#12	7	552 VA			500 VA			8	#12	1	20 A	BNA PWR Junction Box Free, MECHANICA...
--	--	--	--	9		552 VA			736 VA		10	#12	1	20 A	UH-1
--	--	--	--	11			552 VA			1080 VA	12	#12	1	20 A	MOTORIZED OVERHEAD DOOR,...
RECEPT, LOCKER ROOM 1219	20 A	1	#12	13	180 VA			180 VA			14	#12	1	20 A	RECEPT, MDF 1208
EF-15	15 A	1	#12	15		400 VA			1165 VA		16	#12	2	20 A	AC-1
AHU INTERNAL LIGHTS/POWER,...	20 A	1	#12	17			0 VA			1165 VA	18	--	--	--	--
*TP-1	20 A	1	#12	19	500 VA			1165 VA			20	#12	2	20 A	AC-2
*TP-1	20 A	1	#12	21		500 VA			1165 VA		22	--	--	--	--
HVAC, MECHANICAL 1206	20 A	1	#12	23			500 VA			300 VA	24	#12	1	20 A	HVAC, MECHANICAL 1206
RECEPT, MECHANICAL 1206	20 A	1	#12	25	540 VA			900 VA			26	#12	1	20 A	RECEPT, MECHANICAL 2200
RECEPT, Room 1206, 1206A	20 A	1	#12	27		720 VA			1200 VA		28	#12	1	20 A	WH-2
RECEPT, MECHANICAL 1206	20 A	1	#12	29			540 VA			1200 VA	30	#12	1	20 A	WH-3
RECEPT, MECHANICAL 1206	20 A	1	#12	31	360 VA			0 VA			32	--	1	20 A	SPARE
VF-1	20 A	1	#12	33		400 VA			0 VA		34	--	1	20 A	SPARE
BNA PWR Junction Box Free,...	20 A	1	#12	35			500 VA			0 VA	36	--	1	20 A	SPARE
CP-2, CP-2	20 A	1	#12	37	1392 VA			0 VA			38	--	1	20 A	SPARE
CP-1	20 A	1	#12	39		1176 VA			0 VA		40	--	1	20 A	SPARE
CP-1	20 A	1	#12	41			1176 VA			0 VA	42	--	1	20 A	SPARE
					6629	9614	10073	TOTAL (VA)							CONNECTED LOAD TOTAL
					55 A	84 A	88 A	AMPS/PHASE							26316 VA

AIC RATING: 15,905 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2EML2 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2420 **MAINS/BUS AMPS:** 100 **LUGS:** Standard
FED FROM: TX-2EML2 **MAIN DISC. TYPE:** MCB LSI X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** 100 ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
X SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
				1							2				
RECEPT, TELECOM 1422	20 A	1	#12	3		360 VA					4				
RECEPT, TELECOM 1422	20 A	1	#12	5			360 VA				6				
RECEPT, TELECOM 1422	20 A	1	#12	7	540 VA						8				
RECEPT, TELECOM 1422	20 A	1	#12	9		540 VA					10				
RECEPT, ELEC 1421	20 A	1	#12	11			360 VA				12				
LIGHTING, ELEC 1421	20 A	1	#12	13	500 VA						14				
				15							16				
				17							18				
				19							20				
				21							22				
				23							24				
RECEPT, MECHANICAL 2420	20 A	1	#12	25	180 VA						26				
FIRE ALARM, TELECOM 1422	20 A	1	#12	27		1000 VA					28				
				29							30				
SPARE	20 A	1	--	31	0 VA						32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA					34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA				36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA						38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA					40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA				42	--	1	20 A	SPARE
					1220	1900	720	TOTAL (VA)							CONNECTED LOAD TOTAL
					11 A	16 A	6 A	AMPS/PHASE							2340 VA

AIC RATING: 3,514 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 1EML1 **TYPE:** Type 1 **VOLTS:** 120/208 Y **PHASE:** 3 **WIRES:** 4

LOCATION: ELEC 1207 **MAINS/BUS AMPS:** 100 **LUGS:** Standard
FED FROM: TX-1EML1 **MAIN DISC. TYPE:** MCB LSI X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** 100 ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
X SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
POWER, ELEV. EQUIP. 1116	20 A	1	#8	1	1080 VA						2				
RECEPT, ELEV. EQUIP. 1116	20 A	1	#12	3		180 VA					4				
RECEPT, MAIN CORRIDOR 1101	20 A	1	#12	5			180 VA				6				
BATTERY CHARGER	20 A	1	#12	7	180 VA						8				
JACKET HEATER	20 A	1	#12	9		180 VA					10				
FIRE ALARM, MDF 1208	20 A	1	#10	11			1500 VA				12				
RECEPT, MDF 1208	20 A	1	#12	13	360 VA						14				
RECEPT, MDF 1208	20 A	1	#12	15		360 VA					16				
RECEPT, MDF 1208	20 A	1	#12	17			360 VA				18				
RECEPT, MDF 1208	20 A	1	#12	19	360 VA						20				
RECEPT, MAIN CORRIDOR 1101	20 A	1	#12	21		180 VA					22				
RECEPT, ELEVATOR-2 1117-2	20 A	1	#12	23			180 VA				24				
RECEPT, Space 1203	20 A	1	#12	25	180 VA						26				
				27							28				
				29							30				
SPARE	20 A	1	--	31	0 VA			0 VA			32	--	1	20 A	SPARE
SPARE	20 A	1	--	33		0 VA			0 VA		34	--	1	20 A	SPARE
SPARE	20 A	1	--	35			0 VA			0 VA	36	--	1	20 A	SPARE
SPARE	20 A	1	--	37	0 VA			0 VA			38	--	1	20 A	SPARE
SPARE	20 A	1	--	39		0 VA			0 VA		40	--	1	20 A	SPARE
SPARE	20 A	1	--	41			0 VA			0 VA	42	--	1	20 A	SPARE
					2160	900	2220	TOTAL (VA)							CONNECTED LOAD TOTAL
					20 A	8 A	20 A	AMPS/PHASE							3780 VA

AIC RATING: 3,866 AMPS RMS SYSM.

NOTES: *PROVIDE 5MA GFCI CIRCUIT BREAKER, **PROVIDE 30MA GFI BREAKER, ***PROVIDE SHUNT TRIP BREAKER

PANELBOARD SCHEDULE

PANEL: 2EMH2 **TYPE:** Type 1 **VOLTS:** 480/277 Y **PHASE:** 3 **WIRES:** 4

LOCATION: MECHANICAL 2420 **MAINS/BUS AMPS:** 200 **LUGS:** Standard
FED FROM: EMDP **MAIN DISC. TYPE:** MLO X DOOR-IN-DOOR
MOUNTING: SURFACE **MAIN DISC. TRIP:** MLO ___ 200% NEUTRAL
BUSSING: ___ ISO GROUND
X SPD

BRANCH BREAKERS

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	A	B	C	A	B	C	CIR. NO.	WIRE SIZE	POLE	AMPS	ITEM
LIGHTING, Other, Room 1201, 1208,...	20 A	1	#12	1	1786 VA			248 VA			2	#12	1	20 A	LIGHTING
LIGHTING, Room 1101, 1207, 1222,...	20 A	1	#12	3		79 VA					4				
LIGHTING, Other, Room 1101, 1400,...	20 A	1	#12	5			763 VA				6				
LIGHTING, Other, Room 1336, 1401,...	20 A	1	#12	7	3520 VA						8				
LIGHTING, Other, Room 2200, 2323,...	20 A	1	#12	9		2499 VA					10				
LIGHTING, Other, Room 511, 1203,...	20 A	1	#12	11			1134 VA				12				
LIGHTING, Room 2200, 2400, 2400A	20 A	1	#12	13	50 VA						14				
TX-2EML2	50 A	3	#6	15		1220 VA					16				
--	--	--	--	17			1900 VA				18				
--	--	--	--	19	720 VA						20				
LIGHTING	20 A	1	#12	21		250 VA					22				
LIGHTING	20 A	1	#12	23			265 VA				24				
LIGHTING, MULTI-PURPOSE 1200	20 A	1	#12	25	760 VA						26				
LIGHTING	20 A	1	#12	27		336 VA					28				
LIGHTING	20 A	1	#12

INDEX OF SWITCHBOARD SCHEDULE

CT/MS	MDP	DPLC1
DPLD1	DPHC1	DPLB1
DPHD1	EMDP	DPPV

PANELBOARD GENERAL NOTES

1. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
2. PROVIDE TYPED PANELBOARD INDEXES AS EACH PANELBOARD. FILL OUT PANELBOARD'S CIRCUIT DIRECTORY CARD UPON COMPLETION OF INSTALLATION WORK. UTILIZE ACTUAL FINAL BUILDING ROOM NUMBERS, NOT ARCHITECTURAL NUMBERS USED ON DRAWINGS. IDENTIFY INDIVIDUAL LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM SERVER, LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM NUMBERS AND EQUIPMENT NAMES. INCLUDE ROOM NUMBER WITH EQUIPMENT CIRCUIT DESIGNATIONS. ALL DIRECTORIES TO BE TYPEWRITTEN.
3. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
4. ALL MECHANICAL AND KITCHEN EQUIPMENT BREAKERS TO BE SIZED PER THE MECHANICAL EQUIPMENT SCHEDULE AND KITCHEN EQUIPMENT SCHEDULE.

ONELINE GENERAL NOTES

1. EMERGENCY EQUIPMENT INDICATED SHALL BE SELECTIVELY COORDINATED TO 0.1 SECONDS PER SPECIFICATION SECTION 26 0573. STUDY SHALL BE SUBMITTED PRIOR TO ALL OTHER EQUIPMENT SUBMITTALS.
2. SEE PLANS FOR LOCATIONS OF PANELBOARDS, SWITCHBOARDS TRANSFER SWITCHES, BUSWAY, TRANSFORMERS DISCONNECTS, ETC. AND PROVIDE NEMA RATED ENCLOSURES AS REQUIRED.
3. SUBMIT DIMENSIONED DRAWINGS OF ALL ELECTRICAL ROOMS SHOWING ALL EQUIPMENT LOCATIONS WITHIN EACH SPACE BASED ON THE EQUIPMENT MANUFACTURER GEAR SIZES WITH ALL EQUIPMENT SHOP DRAWINGS.
4. PROVIDE AN ARC ENERGY-REDUCING MAINTENANCE SWITCH FOR ALL OVER-CURRENT PROTECTIVE DEVICES RATED 1200 AMPS OR HIGHER. REFER TO SPECIFICATION SECTION 26 2815 OVER-CURRENT PROTECTIVE DEVICES AND 240.87 OF CURRENT NATIONAL ELECTRICAL CODE (NEC).
5. PROVIDE ELECTRONIC TRIP CIRCUIT BREAKERS FOR ALL CIRCUIT BREAKERS 400 AMPS AND ABOVE. REFER TO THE OVERCURRENT PROTECTION SPECIFICATION SECTION FOR ADDITIONAL REQUIREMENTS.
6. ALL EQUIPMENT SHALL BE FULLY RATED. NO SERIES RATINGS ARE ALLOWED. REFER TO SPECIFICATION SECTIONS FOR ADDITIONAL DETAILS.
7. PROVIDE PRELIMINARY SHORT CIRCUIT STUDY SUBMITTAL PRIOR TO SUBMITTAL OF ANY ELECTRICAL EQUIPMENT. REFER TO SPECIFICATION SECTION 26 0573 PROTECTIVE DEVICE STUDY. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
8. PROVIDE A SURGE PROTECTIVE DEVICE ON EACH SWITCHBOARD AND PANELBOARD LOCATED ON THE EMERGENCY DISTRIBUTION SYSTEM. REFER TO SPECIFICATION SECTION 26 4313 SURGE-PROTECTIVE DEVICES (SPD) FOR LOCATION CATEGORY.
9. REFER TO DISTRIBUTION BOARD AND PANELBOARD SCHEDULES FOR ADDITIONAL BREAKERS AND SPD REQUIREMENTS.
10. GFPE PROTECTION OF THE MAIN BREAKER SHALL BE TESTED PRIOR TO THE RELEASE OF THE METER AND RESULTS SHALL BE SUBMITTED TO THE SCHOOL DISTRICT BUILDING OFFICIAL.
11. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
12. PROVIDE ALL REQUIRED LUG ADAPTERS, PIN REDUCERS, POLARIS LUG KITS, ETC. AS REQUIRED. PROVIDE NEC SIZED JUNCTION BOX AHEAD OF PANELBOARD/GEAR AS NEEDED TO LOCATED AND TERMINATE CONDUCTORS ON POLARIS LUG ADAPTERS (<10' FROM FINALTERMINATION AT PANELBOARD). SIZE DOWN TO CONDUCTORS THAT FIT THE AVAILABLE LUGS AND/OR BREAKERS.

SWITCHBOARD SCHEDULE

SWITCHBOARD: CT/MS

LOCATION: YARD 1206A | VOLTS: 480/277 Y | MAINS/BUS AMPS: 2,000
FED FROM: | PHASE: 3 | MAIN DISC. TYPE: MCB
MOUNTING: | WIRES: 4 | MAIN DISC. TRIP: 2000
ENCLOSURE: NEMA 3R | LUGS: Standard | MAIN DISC. FRM.: 2000
BUSSING: | DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	MDP	3	1600 A	870749 VA	LSI
2	RMP PV DISCONNECT	3	450 A	0 VA	LSI
3	SPD	3	60 A	0 VA	
4	SPARE	3	400 A	0 VA	LSI
5	SPACE ONLY	1	--	--	
6	SPACE ONLY	1	--	--	
7	SPACE ONLY	1	--	--	
8	SPACE ONLY	1	--	--	
9	SPACE ONLY	1	--	--	
10	SPACE ONLY	1	--	--	
			TOTAL CONN. LOAD:	884893 VA	
			TOTAL AMPS:	1049 A	

AIC RATING: 65,064

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPLD1

LOCATION: ELEC 1421 | VOLTS: 120/208 Y | MAINS/BUS AMPS: 400
FED FROM: TX-DPLD1 | PHASE: 3 | MAIN DISC. TYPE: MCB
MOUNTING: SURFACE | WIRES: 4 | MAIN DISC. TRIP: 400
ENCLOSURE: | LUGS: Standard | MAIN DISC. FRM.: 400
BUSSING: | DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1LD1	3	200 A	10390 VA	
2	1LD2	3	200 A	21982 VA	
3	1LD3	3	225 A	15340 VA	
4	2LD1	3	200 A	13530 VA	
5	2LD2	3	200 A	20220 VA	
6	2LD3	3	225 A	13496 VA	
7	SPARE	3	225 A	0 VA	
8	SPARE	3	225 A	0 VA	
9					
10					
			TOTAL CONN. LOAD:	93018 VA	
			TOTAL AMPS:	258 A	

AIC RATING: 12,677

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPHD1

LOCATION: ELEC 1421 | VOLTS: 480/277 Y | MAINS/BUS AMPS: 400
FED FROM: MDP | PHASE: 3 | MAIN DISC. TYPE: MLO
MOUNTING: | WIRES: 4 | MAIN DISC. TRIP: MLO
ENCLOSURE | LUGS: Standard | MAIN DISC. FRM.:
BUSSING: | DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	TX-DPLD1	3	175 A	94958 VA	
2	1HD1	3	150 A	9817 VA	
3	2HD1	3	225 A	89195 VA	
4	SPARE	3	225 A	0 VA	
5	SPARE	3	225 A	0 VA	
6	SPARE	3	225 A	0 VA	
7					
8					
9					
10					
			TOTAL CONN. LOAD:	192030 VA	
			TOTAL AMPS:	231 A	

AIC RATING: 31,265

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: MDP

LOCATION: ELEC 1207, | VOLTS: 480/277 Y | MAINS/BUS AMPS: 1,600
FED FROM: CT/MS | PHASE: 3 | MAIN DISC. TYPE: MLO
MOUNTING: | WIRES: 4 | MAIN DISC. TRIP: MLO
ENCLOSURE | LUGS: Standard | MAIN DISC. FRM.:
BUSSING: | DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1HB3	3	225 A	3969 VA	
2	2MHB1	3	400 A	33505 VA	
3	TX-DPLB1	3	400 A	235758 VA	LSI 400A FRAME
4	DPHC1	3	600 A	251123 VA	LSI 800A FRAME
5	DPHD1	3	400 A	193970 VA	LSI 600A FRAME
6	1MHB1	3	400 A	111771 VA	
7	SPARE	3	150 A	0 VA	
8	ATS-EMDP	3	300 A	35314 VA	LSI
9	ATS-OEMHF	3	60 A	11942 VA	LSI
10	225A SPARE	3	225 A	0 VA	
11	225A SPARE	3	225 A	0 VA	
12	400A SPARE	3	400 A	0 VA	LSI
13	225A SPARE	3	225 A	0 VA	
14	400A SPARE	3	400 A	0 VA	LSI
15	POWER CONDITIONING	3	600 A	0 VA	LSI 800A FRAME
16	SPD	3	--	--	
17	SPACE ONLY	1	--	--	
18	SPACE ONLY	1	--	--	
			TOTAL CONN. LOAD:	864803 VA	
			TOTAL AMPS:	1040 A	

AIC RATING: 61,408

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPHC1

LOCATION: ELEC 1333 | VOLTS: 480/277 Y | MAINS/BUS AMPS: 600
FED FROM: MDP | PHASE: 3 | MAIN DISC. TYPE: MLO
MOUNTING: | WIRES: 4 | MAIN DISC. TRIP: MLO
ENCLOSURE | LUGS: Standard | MAIN DISC. FRM.:
BUSSING: | DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1HC1	3	225 A	26140 VA	
2	TX-DPLC1	3	300 A	106564 VA	
3	2HC1	3	225 A	105420 VA	
4	SPARE	3	225 A	0 VA	
5	SPARE	3	225 A	0 VA	
6	SPARE	3	225 A	0 VA	
7	ELEVATOR - LSI	3	50 A	13000 VA	LSI
8					
9					
10					
			TOTAL CONN. LOAD:	248683 VA	
			TOTAL AMPS:	299 A	

AIC RATING: 30,028

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: EMDP

LOCATION: ELEC 1207 | VOLTS: 480/277 Y | MAINS/BUS AMPS: 300
FED FROM: ATS-EMDP | PHASE: 3 | MAIN DISC. TYPE: MCB
MOUNTING: | WIRES: 4 | MAIN DISC. TRIP: 300
ENCLOSURE | LUGS: Standard | MAIN DISC. FRM.: 300
BUSSING: | DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1EMHF	3	200 A	5280 VA	LSI
2	2EMH2	3	200 A	15754 VA	LSI
3	2EMH1	3	200 A	14280 VA	LSI
4	SPARE	3	200 A	0 VA	LSI
5					
6					
7					
8					
9					
10					
			TOTAL CONN. LOAD:	28814 VA	
			TOTAL AMPS:	35 A	

AIC RATING: 69,917

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPLC1

LOCATION: ELEC 1333 | VOLTS: 120/208 Y | MAINS/BUS AMPS: 600
FED FROM: TX-DPLC1 | PHASE: 3 | MAIN DISC. TYPE: MCB
MOUNTING: SURFACE | WIRES: 4 | MAIN DISC. TRIP: 600
ENCLOSURE | LUGS: Standard | MAIN DISC. FRM.: 600
BUSSING: | DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1LC1	3	200 A	21638 VA	
2	1LC2	3	200 A	18740 VA	
3	1LC3	3	225 A	20960 VA	
4	2LC1	3	200 A	10726 VA	
5	2LC2	3	200 A	17300 VA	
6	2LC3	3	225 A	17200 VA	
7	SPARE	3	225 A	0 VA	
8	SPARE	3	225 A	0 VA	
9	SPARE	3	225 A	0 VA	
10					
			TOTAL CONN. LOAD:	104124 VA	
			TOTAL AMPS:	289 A	

AIC RATING: 16,234

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPLB1

LOCATION: ELEC 1207 | VOLTS: 120/208 Y | MAINS/BUS AMPS: 800
FED FROM: TX-DPLB1 | PHASE: 3 | MAIN DISC. TYPE: MCB
MOUNTING: | WIRES: 4 | MAIN DISC. TRIP: 800
ENCLOSURE | LUGS: Standard | MAIN DISC. FRM.: 800
BUSSING: | DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF...	AMPS	Load	REMARKS
1	1LB1	3	200 A	6640 VA	
2	K1	3	225 A	57555 VA	
3	K2	3	225 A	45415 VA	
4	1LA1	3	225 A	37486 VA	
5	1LA2	3	225 A	14456 VA	
6	1MLB1	3	225 A	26316 VA	
7	1LB2	3	200 A	10938 VA	
8	2LA1	3	225 A	17500 VA	
9	UDS-K-33	3	70 A	19454 VA	
10	***SHUNT TRIP-UDS WALL	3	--	--	
11	SPARE	3	400 A	0 VA	
12	SPARE	3	225 A	0 VA	
13					
14					
15					
16					
			TOTAL CONN. LOAD:	234398 VA	
			TOTAL AMPS:	651 A	

AIC RATING: 26,611

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPPV

LOCATION: MECHANICAL 2420 | VOLTS: 480/277 Y | MAINS/BUS AMPS: 600
FED FROM: RMP PV DISCONNECT | PHASE: 3 | MAIN DISC. TYPE: MLO
MOUNTING: | WIRES: 4 | MAIN DISC. TRIP: MLO
ENCLOSURE | LUGS: Standard | MAIN DISC. FRM.:
BUSSING: | DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	INV-1	3	200 A	0 VA	LSI
2	INV-2	3	200 A	0 VA	LSI
3	SPARE	3	200 A	0 VA	LSI
4	SPARE	3	200 A	0 VA	
5					
6					
7					
8					
9					
10					
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 27,377

NOTES:

R&O CONSTRUCTION (CMGC) HAS PREVIOUSLY PROCURED THE CT/MS AND MDP SWITCHGEAR DUE TO PROJECT SCHEDULE CONSTRAINTS. DIVISION 26 SHALL INCLUDE WITHIN THEIR BID PACKAGE THE RECEIVING AND INSTALLATION OF THE PREVIOUSLY PROCURED CT/MS AND MDP ALONG WITH THE ENTIRETY THE REMAINING GEAR, EQUIPMENT, FEEDERS, AND THE COMPREHENSIVE INSTALLATION OF THE ENTIRE ONE-LINE AND ELECTRICAL INFRASTRUCTURE WITHIN THEIR BID. DIVISION 26 WILL SHOULDER THE RESPONSIBILITY OF BOTH RECEIVING THE ITEMS AND ENSURING THE COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEM, ALONG WITH ALL OTHER NECESSARY PREREQUISITES TO ESTABLISH A FULLY FUNCTIONAL ELECTRICAL SYSTEM

VCBO®

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

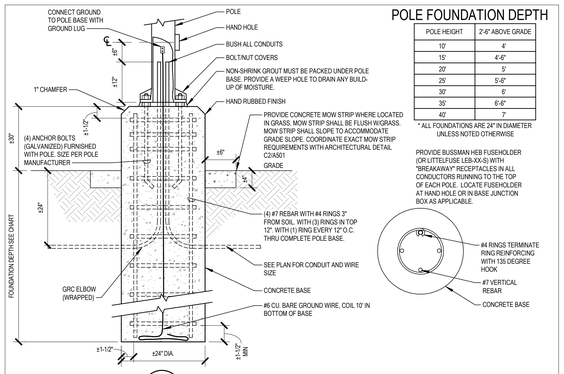
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SWITCHBOARD SCHEDULES

E316

11/6/2023 7:00:42 PM



POLE FOUNDATION DEPTH

POLE HEIGHT	2'-6" ABOVE GRADE
10'	4'
15'	4'-6"
20'	5'
25'	5'-6"
30'	6'
35'	6'-6"
40'	7'

* ALL FOUNDATIONS ARE 24" IN DIAMETER UNLESS NOTED OTHERWISE

PROVIDE BUSSMAN HEB FUSEHOLDER (OR LITTELFUSE LEB-XX-S) WITH "BREAKAWAY" RECEPTACLES IN ALL CONDUCTORS RUNNING TO THE TOP OF EACH POLE. LOCATE FUSEHOLDER AT HAND HOLE OR IN BASE JUNCTION BOX AS APPLICABLE.

DIAGRAM C003 LIGHTING POLE FOUNDATION
NTS

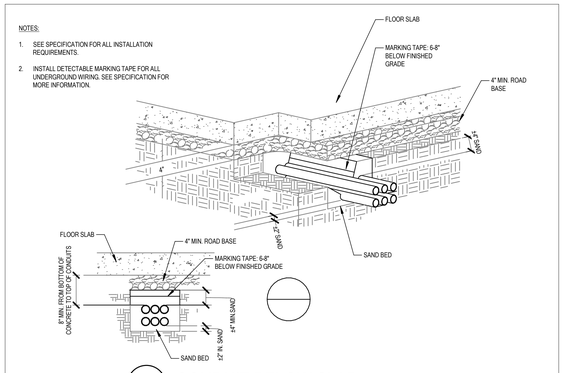


DIAGRAM UOO7 CONDUIT BELOW SLAB
NTS

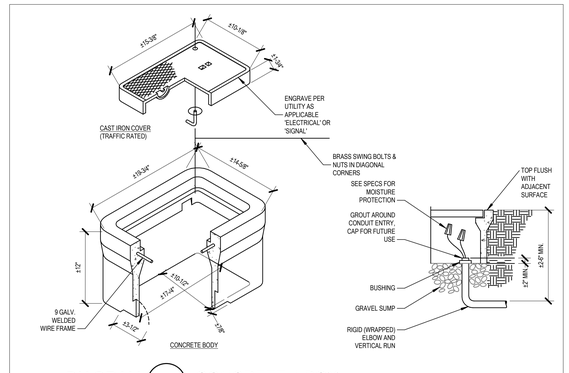


DIAGRAM L003 CONCRETE J-BOX
NTS

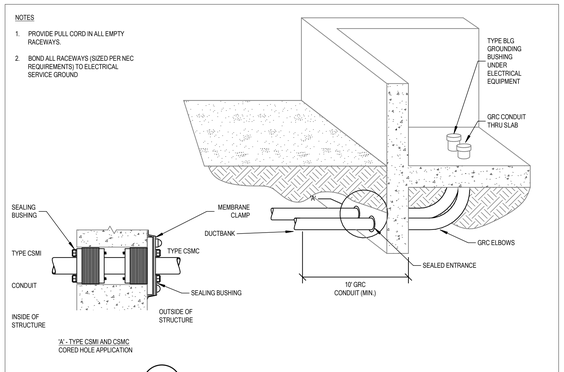


DIAGRAM F003 BUILDING ENTRANCE CONDUITS
NTS

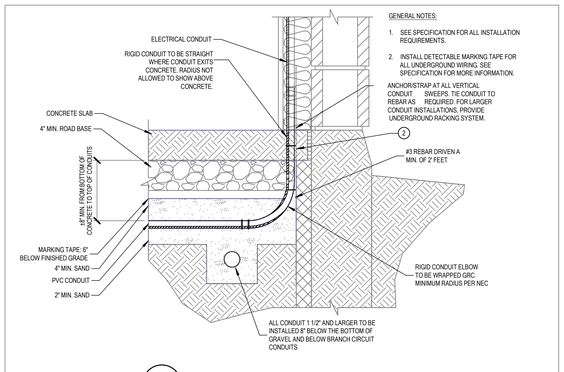
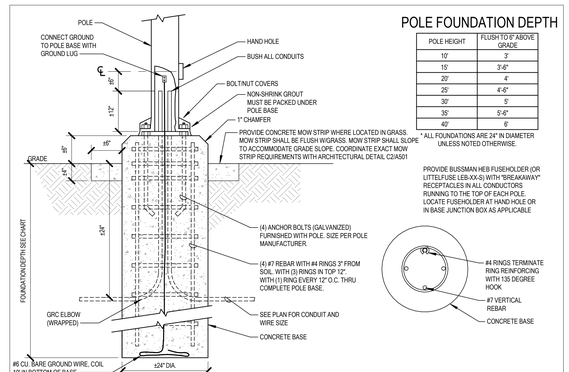


DIAGRAM F016 TYPICAL CONDUIT INSTALLATION
NTS



POLE FOUNDATION DEPTH

POLE HEIGHT	FLUSH TO 8" ABOVE GRADE
10'	3'
15'	3'-6"
20'	4'
25'	4'-6"
30'	5'
35'	5'-6"
40'	6'

* ALL FOUNDATIONS ARE 24" IN DIAMETER UNLESS NOTED OTHERWISE.

PROVIDE BUSSMAN HEB FUSEHOLDER (OR LITTELFUSE LEB-XX-S) WITH "BREAKAWAY" RECEPTACLES IN ALL CONDUCTORS RUNNING TO THE TOP OF EACH POLE. LOCATE FUSEHOLDER AT HAND HOLE OR IN BASE JUNCTION BOX AS APPLICABLE

DIAGRAM C002 LIGHTING POLE FOUNDATION
NTS

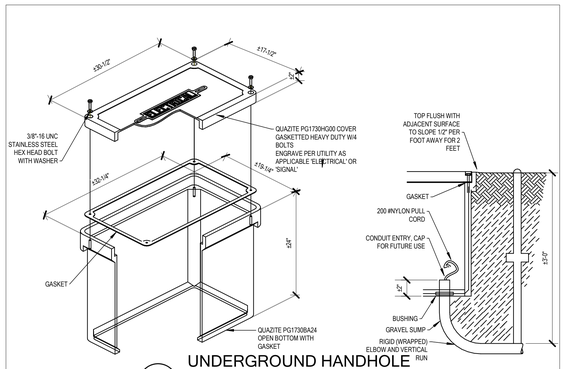


DIAGRAM LO11 UNDERGROUND HANDHOLE (17"X30")
NTS

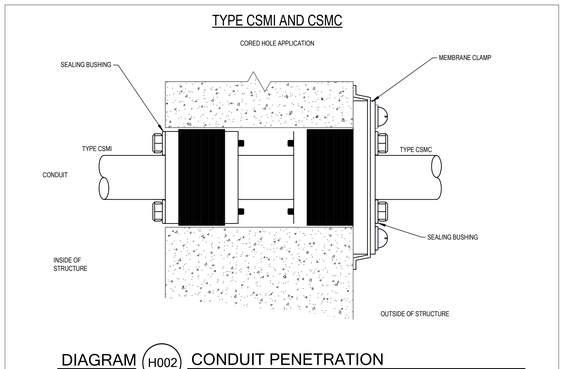


DIAGRAM H002 CONDUIT PENETRATION
NTS

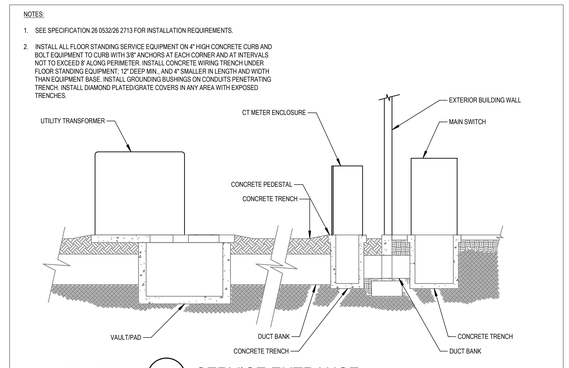


DIAGRAM U008 SERVICE ENTRANCE
NTS

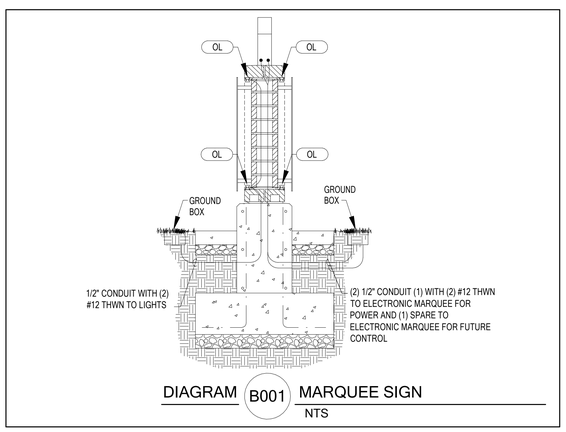


DIAGRAM B001 MARQUEE SIGN
NTS

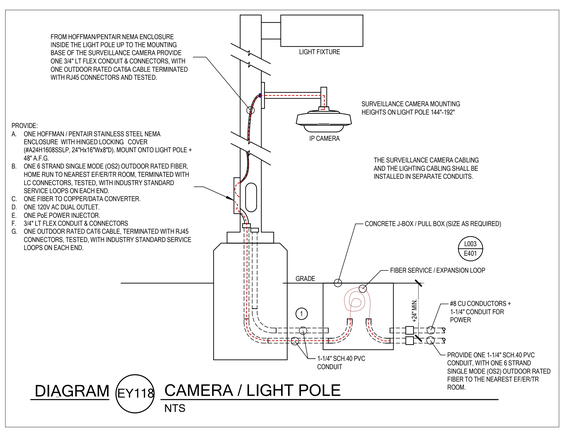


DIAGRAM EY118 CAMERA / LIGHT POLE
NTS

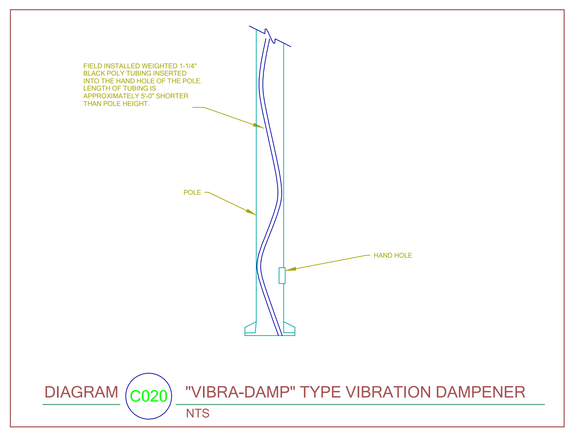


DIAGRAM C020 "VIBRA-DAMP" TYPE VIBRATION DAMPENER
NTS

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524 SOUTH 600 EAST
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VCBO NUMBER: 22785
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BRIAN HICKS No. 7199857 PROFESSIONAL ENGINEER STATE OF UTAH
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SALT LAKE ST. GEORGE

REV DATE DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SITE DIAGRAMS

E401

11/6/2023 7:00:43 PM

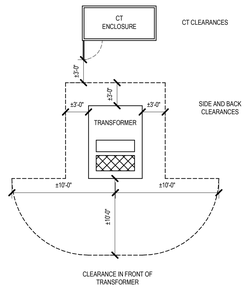
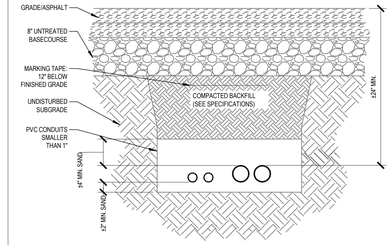


DIAGRAM Q014 TRANSFORMER/CT ENCLOSURE LAYOUT (RMP)

NTS

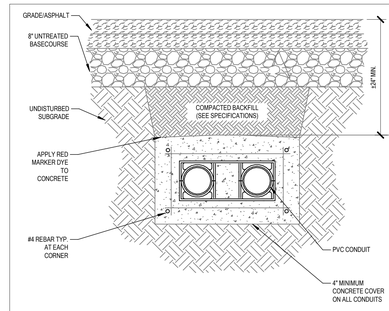


NOTES:

1. SEE SPECIFICATION FOR ALL INSTALLATION REQUIREMENTS.
2. INSTALL DETECTABLE MARKING TAPE FOR ALL UNDERGROUND WIRING. SEE SPECIFICATION FOR MORE INFORMATION.
3. APPLY PROTECTIVE COATING TO METALLIC RACEWAYS IN DIRECT CONTACT WITH EARTH OR FILL OF ANY TYPE; CONSISTING OF SPIRALLY WRAPPED PVC TAPE (1/2" MINIMUM OVERLAP OF SCOTCH WRAP TAPE OR EQUAL); OR FACTORY APPLIED VINYL CLADDING (MINIMUM THICKNESS .020 INCHES). COMPLETELY WRAP AND TAPE ALL FIELD JOINTS.
4. BURIAL DEPTHS MUST COMPLY WITH NEC SECTION 300.5 BUT IN NO CASE BE LESS THAN 24", UNLESS NOTED OTHERWISE ON DRAWINGS.
5. LOCATE AND PROTECT ALL CROSSINGS OF EXISTING UTILITIES AND OTHER UNDERGROUND WORK.
6. PROVIDE 6 INCHES TOP SOIL IN PLANTED AREAS INSTEAD OF BASECOARSE AND ASPHALT.
7. SEE SPECIFICATIONS FOR SUBSIDENCE WARRANTY.
8. SEE SPECIFICATIONS FOR STORAGE AND REMOVAL OF EXCAVATED MATERIAL.

DIAGRAM U009 CONDUIT BELOW GRADE

NTS

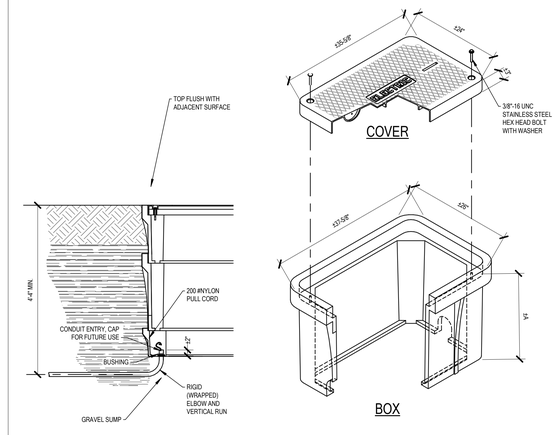


NOTES:

1. SEE SPECIFICATION FOR ALL INSTALLATION REQUIREMENTS.
2. FOR FEEDERS UNDER 600 VOLTS, ENCASE FEEDERS 1-1/4" AND LARGER, INDIVIDUALLY IN CONCRETE WHERE INSTALLED BELOW GRADE. SEE DUCT BANKS IN SPECIFICATION FOR MORE INFORMATION.
3. BRANCH CIRCUITS, SIGNAL AND CONTROL CIRCUITS, AND INDIVIDUAL EQUIPMENT CIRCUITS RATED LESS THAN 100 AMPS. ENCASE NON-METALLIC CONDUIT 40-AMP CIRCUITS, 1-1/4" AND LARGER IN CONCRETE. SEE DUCT BANKS IN SPECIFICATION FOR MORE INFORMATION.
4. LOCATE AND PROTECT ALL CROSSINGS OF EXISTING UTILITIES AND OTHER UNDERGROUND WORK.
5. PROVIDE 6 INCHES TOP SOIL IN PLANTED AREAS INSTEAD OF BASECOARSE AND ASPHALT.
6. SEE SPECIFICATIONS FOR SUBSIDENCE WARRANTY.
7. SEE SPECIFICATIONS FOR STORAGE AND REMOVAL OF EXCAVATED MATERIAL.

DIAGRAM U010 ELECTRICAL DUCTBANK (SERVICE ENTRANCE ONLY)

NTS



COVERS (QUAZITE)	PART NO.
LOCKING COVER	PG2436CA00
NON-LOCKING COVER	PG2436WA00
HEAVY DUTY STEEL LOCKING COVER	PG2436SA00
HEAVY DUTY LOCKING COVER	PG2436HA00

BOXES (QUAZITE)	PART NO.	DIMENSION (A)
STANDARD BOX	PG2436BA18	18"
	PG2436BA24	24"
	PG2436BA30	30"
BOX WITH 2 MOUSEHOLES	PG2436BB18	18"
	PG2436BB24	24"
	PG2436BB30	30"
BOX WITH SOLID BASE	PG2436DA18	18"
	PG2436DA24	24"
	PG2436DA30	30"

EXTENSIONS (QUAZITE)	PART NO.	DIMENSION (B)
EXTENSION (ONE PER BOX)	LG2436ED08	8-3/4"
EXTENSION WITH SOLID BASE	LG2436RD08	9-1/4"

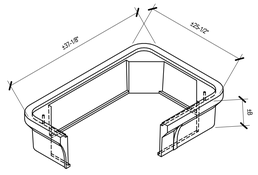


DIAGRAM L012 UNDERGROUND HANDHOLE (24"X36")

NTS

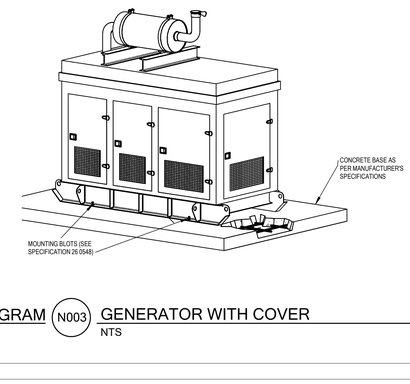


DIAGRAM N003 GENERATOR WITH COVER

NTS

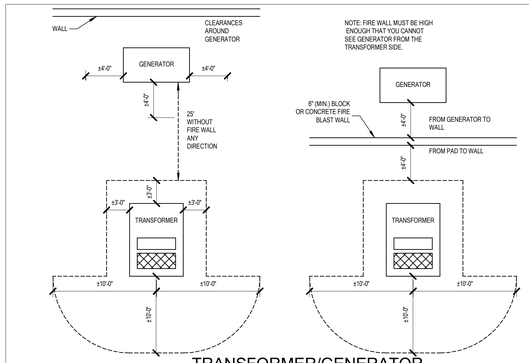
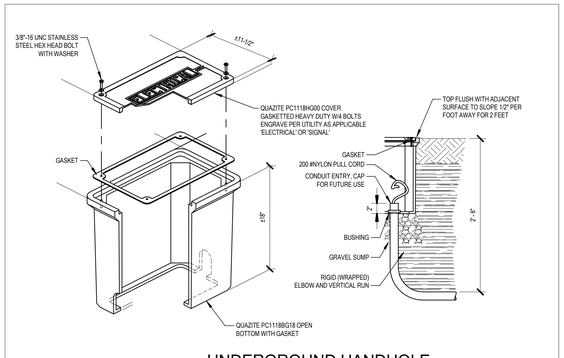


DIAGRAM Q013 TRANSFORMER/GENERATOR LAYOUT (RMP)

NTS


3/8"-16 UNC STAINLESS STEEL HEX HEAD BOLT WITH WASHER
±11-1/2"
QUAZITE PC1118BHQ00 COVER GASKETTED HEAVY DUTY W/4 BOLTS ENGRAVE PER UTILITY AS APPLICABLE 'ELECTRICAL' OR 'SIGNAL'
GASKET
±18"
QUAZITE PC1118BG18 OPEN BOTTOM WITH GASKET
TOP FLUSH WITH ADJACENT SURFACE TO SLOPE 1/2" PER FOOT AWAY FOR 2 FEET
GASKET
200 #NYLON PULL CORD
CONDUIT ENTRY, CAP FOR FUTURE USE
BUSHING
GRAVEL SUMP
RIGID (WRAPPED) ELBOW AND VERTICAL RUN
6"
6"
6"

PV-1-1 PV INFO

MODULE	BIPRO TD6I72M 440
# OF MODULE	XXX
TOTAL KW DC	XXX
INVERTER	XXX
# OF INVERTER	XXX
TOTAL KW AC	XXX
# OF MPPT PER INVERTER	XXX
# OF PORT PER MPPT	XXX
DC/AC RATIO	XXX

PV-1-2 PV ROOF AND RACKING INFO

ROOF TYPE	FLAT
METHOD OF RACKING	ECOFOOT 2+ BALLAST
# OF SLIP SHEETS	XXX
# OF BLOCK	XXX
# OF ROOF ANCHORS	XXX

PV-1-3 INVERTER STRING CONFIG

TOTAL XXX MODS	INVERTER 1, SE-66.6K-US	(X) xx PANELS STRINGS, ARRAY 1,2
		(X) xx PANELS STRINGS, ARRAY 1,2
	INVERTER 2, SE-66.6K-US	(X) xx PANELS STRINGS, ARRAY 1,2,3,5
		(X) xx PANELS STRINGS, ARRAY 3,5
	INVERTER 3, SE-66.6K-US	(X) xx PANELS STRINGS, ARRAY 5,6
		(X) xx PANELS STRINGS, ARRAY 5,6

LEGEND

- INVERTER
- SOLAR PANEL
- BUILDING
- OFFSET LINE FROM EDGE
- SOLAR COMBINDER
- OBSTRUCTIONS

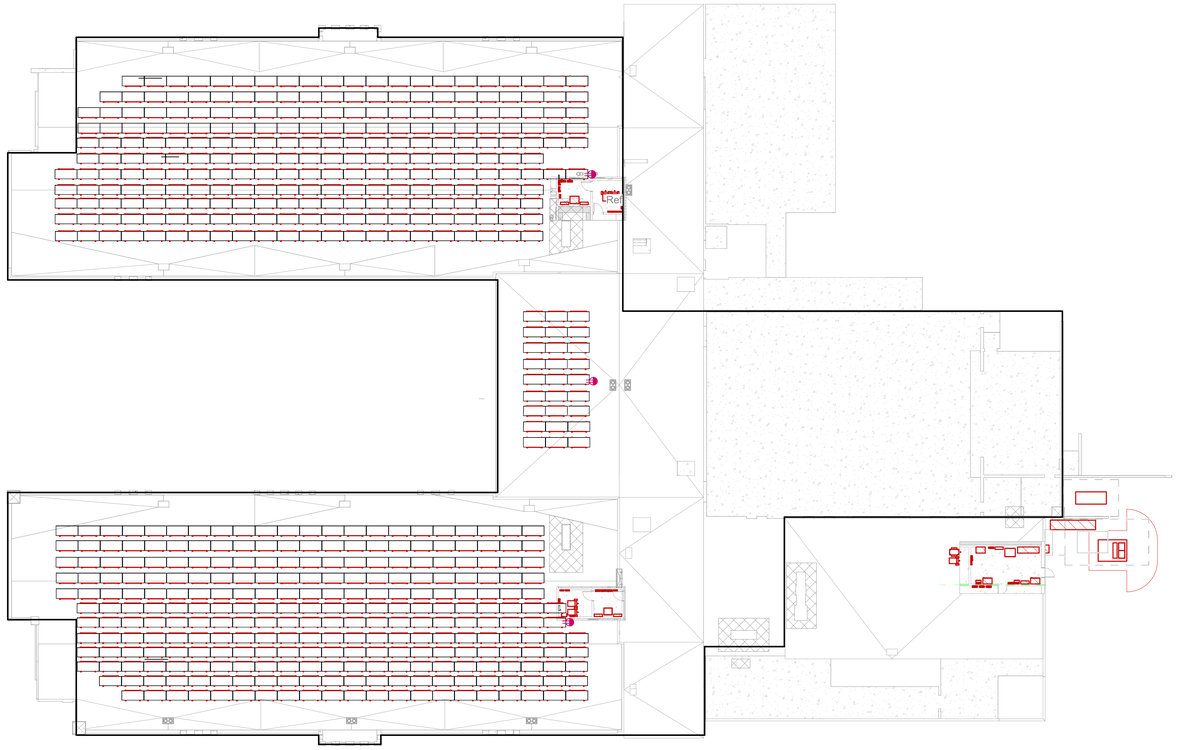
ROOFING GENERAL NOTES

1. CONTRACTOR SHALL NOT INSTALL ELECTRICAL CONDUIT(S) THROUGH THE NEW MECHANICAL CURB AND/OR DUCTWORK. LOCATE ELECTRICAL CONDUITS A MINIMUM OF 12" AWAY FROM MECHANICAL CURB ALONG WITH MAINTAINING A MINIMUM OF 12" BETWEEN ANY CONDUIT AND ANY OTHER OBSTACLE. CONDUITS MUST EXTEND 24" FROM DECK WITH 16"-18" OF CONDUIT PROTRUDING FROM FINISHED ROOF LINE. PROVIDE LIQUID TIGHT CONDUIT FROM CONDUIT STUB TO FINAL CONNECTION AT EQUIPMENT. COORDINATE ANY AND ALL OTHER REQUIRED ROOFING REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.

GENERAL SHEET NOTES

1. WORKMANSHIP THROUGHOUT THE INSTALLATION SHALL BE CONSISTENT FROM ONE PV ARRAY/RACK TO THE NEXT. INSTALLATION IS EXPECTED TO BE NEAT, HAVE A GOOD MECHANICAL APPEARANCE AND CONFORM TO BEST ELECTRICAL CONSTRUCTION PRACTICES. WHEREVER POSSIBLE, SUPPORT AND SECURE ALL PV WIRING TO RACKING BENEATH MODULES IN MANNER THAT WIRING IS PROTECTED FROM PHYSICAL DAMAGE. CONTRACTOR SHALL SUBMIT CONDUIT ROUTING DETAIL TO ENGINEER FOR REVIEW PRIOR TO ROUGH-IN/INSTALLATION.
2. PV WIRING BETWEEN ROWS SHALL BE INSTALLED IN MINIMUM 3/4" IMC CONDUIT MOUNTED A MINIMUM OF 1" ABOVE THE ROOF. IMC CONDUIT SHALL BE SECURELY FASTENED AT INTERVALS NOT TO EXCEED 10 FEET AND WITHIN 3 FEET OF BOX OR TERMINATION POINT.
3. PROVIDE PROPER ELECTRICAL IDENTIFICATION AND LABELING OF PV EQUIPMENT AS REQUIRED BY THE LATEST VERSION OF THE NEC 690 AND 705. REFER SPECIFICATION SECTION 26 0553, 26 3100, NEC, AND RMP E.G. EQUIPMENT IDENTIFICATION LABELS OF ENGRAVED PLASTIC-LAMINATE (RED BACKGROUND WITH WHITE ENGRAVING), ETC.
4. MAINTAIN A MINIMUM OF AT LEAST 10' BETWEEN PV SYSTEM COMPONENTS AND ROOF EDGE.

SHEET KEYNOTES



PV SYSTEM STRINGING DIAGRAM
SCALE = 1" = 20'-0"

PV INSTALLER/DIVISION 26 COORDINATE
FINAL ROOF EQUIPMENT AND
PENETRATIONS WITH ALL TRADES.
ADJUST LAYOUT ACCORDINGLY

VCBO®

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524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
801.575.8800
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CLIENT NUMBER: 23142
DATE: NOVEMBER 08 2023

BNA CONSULTING

4225 Lake Park Blvd, Suite 275
West Valley City, UT 84120

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SALT LAKE ST. GEORGE

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PV SYSTEM STRINGING DIAGRAM

E403

11/8/2023 7:00:48 PM

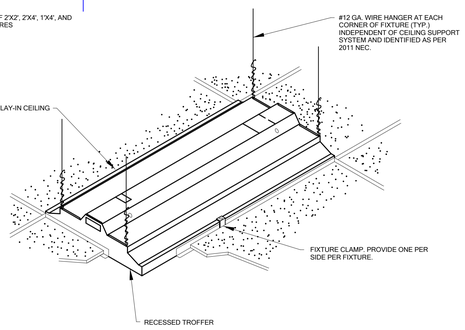


DIAGRAM A001 TYP. RECESSED FIXTURE MOUNTING

NTS

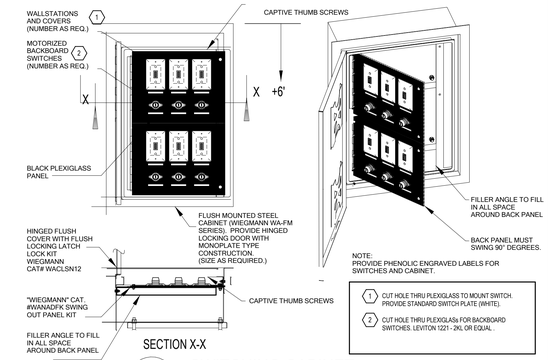
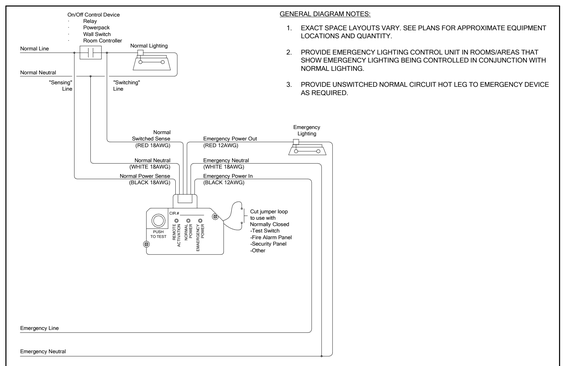


DIAGRAM P004 SWITCHING CABINET

NTS



GENERAL DIAGRAM NOTES:

1. EXACT SPACE LAYOUTS VARY. SEE PLANS FOR APPROXIMATE EQUIPMENT LOCATIONS AND QUANTITY.
2. PROVIDE EMERGENCY LIGHTING CONTROL UNIT IN ROOMS/AREAS THAT SHOW EMERGENCY LIGHTING BEING CONTROLLED IN CONJUNCTION WITH NORMAL LIGHTING.
3. PROVIDE UNSWITCHED NORMAL CIRCUIT HOT LEG TO EMERGENCY DEVICE AS REQUIRED.

DIAGRAM S040 EMERGENCY POWER CONTROL DEVICE

NTS

NOTES:
IN OPEN GYMNASIUMS, AUDITORIUMS, ETC; ALL CONDUIT SHALL BE INSTALLED IN STRAIGHT LINES PARALLEL TO, OR AT RIGHT ANGLES TO, THE STRUCTURE OR ADJACENT BUILDING ELEMENTS. SEPARATIONS BETWEEN CONDUITS AND FASTENINGS OF CONDUITS SHALL BE NEAT AND CONSISTENT. CONDUIT SHALL BE INSTALLED AND HELD AS TIGHT TO THE STRUCTURAL DECK AS CODE WILL ALLOW (1.5"). CONDUIT PENETRATION FROM WALL SHALL BE ABOVE JOIST AND EQUAL TO THE OVERALL CONDUIT PATH THROUGHOUT AREA. NO CONDUITS SHALL BE ALLOWED TO RUN PERPENDICULAR TO THE BOTTOM CHORD AND AT THE BOTTOM OF THE JOISTS. NO SPANNING OVER TO THE NEAREST JOIST. OVERALL INSTALLATION SHALL BE ACCOMPLISHED IN AN AESTHETIC AND WORKMANLIKE MANNER. COORDINATE CONDUIT ROUTING PLAN WITH GENERAL CONTRACTOR PRIOR TO ANY CONDUIT ROUGH-IN.

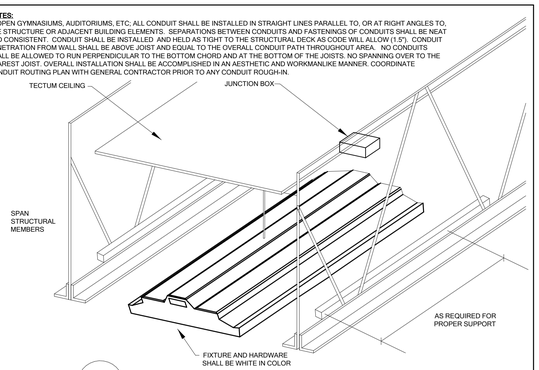


DIAGRAM A029 TYP. SUSPENDED LIGHT MOUNTING #3

NTS

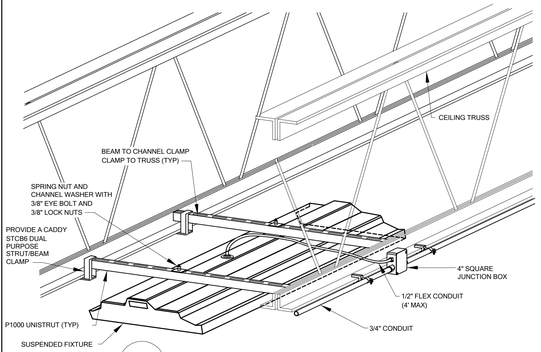


DIAGRAM A027 SUSPENDED LIGHT

NTS

NOTES:
IN OPEN GYMNASIUMS, AUDITORIUMS, ETC; ALL CONDUIT SHALL BE INSTALLED IN STRAIGHT LINES PARALLEL TO, OR AT RIGHT ANGLES TO, THE STRUCTURE OR ADJACENT BUILDING ELEMENTS. SEPARATIONS BETWEEN CONDUITS AND FASTENINGS OF CONDUITS SHALL BE NEAT AND CONSISTENT. CONDUIT SHALL BE INSTALLED AND HELD AS TIGHT TO THE STRUCTURAL DECK AS CODE WILL ALLOW (1.5"). CONDUIT PENETRATION FROM WALL SHALL BE ABOVE JOIST AND EQUAL TO THE OVERALL CONDUIT PATH THROUGHOUT AREA. NO CONDUITS SHALL BE ALLOWED TO RUN PERPENDICULAR TO THE BOTTOM CHORD AND AT THE BOTTOM OF THE JOISTS. NO SPANNING OVER TO THE NEAREST JOIST. OVERALL INSTALLATION SHALL BE ACCOMPLISHED IN AN AESTHETIC AND WORKMANLIKE MANNER. COORDINATE CONDUIT ROUTING PLAN WITH GENERAL CONTRACTOR PRIOR TO ANY CONDUIT ROUGH-IN.

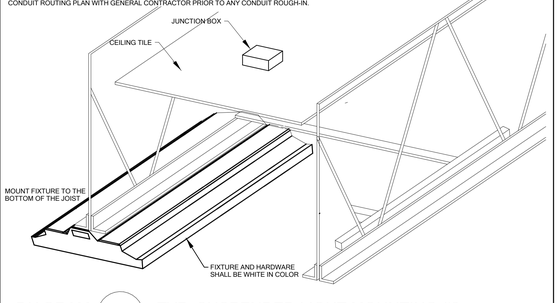


DIAGRAM A028 TYP. SUSPENDED LIGHT MOUNTING #2

NTS

INTERIOR LIGHTING
EXTERIOR LIGHTING
EGRESS LIGHTING
RAISE
LOWER
ALL OFF

WALLSTATION 'LC1' CONFIGURATION	
ENGRAVING	PROGRAMMING
INTERIOR LIGHTING	BUTTON SHALL PROVIDE ON/OFF CONTROL OF RELAYED CONTROLLED INTERIOR LIGHTS.
EXTERIOR LIGHTING	BUTTON SHALL PROVIDE ON/OFF CONTROL OF EXTERIOR AND VESTIBULE BUILDING LIGHTS.
EGRESS LIGHTING	BUTTON SHALL PROVIDE ON/OFF CONTROL OF EMERGENCY RELAYED CONTROLLED INTERIOR LIGHTS.
RAISE	BUTTON SHALL RAISE LIGHTING LEVELS DAYLIGHT ZONES.
LOWER	BUTTON SHALL LOWER LIGHTING LEVELS IN DAYLIGHT ZONES.
ALL OFF	BUTTON SHALL TURN OFF ALL RELAYED CONTROLLED LIGHTING.
CONTROL SEQUENCE	
ALL LIGHTS CONTROLLED BY THE BUILDING RELAY PANELS SHALL BE PROGRAMMED TO MEET THE REQUIREMENTS OF THE IECC 2018. INTERIOR AND EXTERIOR LIGHTING SHALL BE SCHEDULED TO BE TURNED ON/OFF AT SCHEDULED TIMES. COORDINATE WITH OWNER FOR EXACT SCHEDULING REQUIREMENTS. WALLSTATION 'LC1' SHALL BE UTILIZED TO OVERRIDE PROGRAMMED SCHEDULES AS NEEDED. OVERRIDE TO LAST UP TO 4 HOURS. ENTRY DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS BASED ON AVAILABLE NATURAL LIGHT LEVELS.	

EAST GYM

ALL ON
HALF
RAISE
LOWER
ALL OFF
EM ONLY

WALLSTATION 'LC2' CONFIGURATION	
ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ALL RELAYS WITHIN THE SPACE, ALL DIMMING ZONES TO 100%.
HALF	BUTTON SHALL TOGGLE ON/OFF LIGHTING WITHIN THE EAST GYM, DIMMING ZONES TO 100%.
RAISE	PRESS AND HOLD - INCREASE ALL DIMMING ZONES LEVELS WITHIN THE EAST GYM
LOWER	PRESS AND HOLD - DECREASE ALL DIMMING ZONES LEVELS WITHIN THE EAST GYM
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF WITHIN THE EAST GYM.
EM ONLY	BUTTON SHALL TOGGLE ON/OFF EGRESS LIGHTING EAST GYM, DIMMING ZONES TO 100%
CONTROL SEQUENCE	
UPON ENTERING THE SPACE, OCCUPANCY SENSOR SHALL TURN LIGHTS ON TO 100% LIGHTING LEVEL, OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. MASTER CLOCK TO TURN OFF LIGHTS AFTER SCHEDULED TIME. SEE RELAY PANEL SCHEDULE FOR MORE PROGRAMMING REQUIREMENTS.	

WEST GYM

ALL ON
HALF
RAISE
LOWER
ALL OFF
EM ONLY

WALLSTATION 'LC3' CONFIGURATION	
ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ON ALL RELAYS WITHIN THE WEST GYM, ALL DIMMING ZONES TO 100%.
HALF	BUTTON SHALL TOGGLE ON/OFF LIGHTING WITHIN THE WEST GYM, DIMMING ZONES TO 100%.
RAISE	PRESS AND HOLD - INCREASE ALL DIMMING ZONES LEVELS WITHIN THE WEST GYM.
LOWER	PRESS AND HOLD - DECREASE ALL DIMMING ZONES LEVELS WITHIN THE WEST GYM.
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF WITHIN THE WEST GYM
EM ONLY	BUTTON SHALL TOGGLE ON/OFF EGREE LIGHTING WEST GYM, DIMMING ZONES TO 100%.
CONTROL SEQUENCE	
UPON ENTERING THE SPACE, OCCUPANCY SENSOR SHALL TURN LIGHTS ON TO 100% LIGHTING LEVEL, MASTER CLOCK TO TURN OFF LIGHTS AFTER SCHEDULED TIME. SEE RELAY PANEL SCHEDULE FOR MORE PROGRAMMING REQUIREMENTS.	

ALL ON
RAISE
LOWER
ALL OFF

WALLSTATION 'LC4' CONFIGURATION	
ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 100%.
RAISE	BUTTON SHALL RAISE ALL RELAYS WITHIN THE SPACE.
LOWER	BUTTON SHALL DIM ALL RELAYS WITHIN THE SPACE
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF.
CONTROL SEQUENCE	
UPON ENTERING THE SPACE, OCCUPANCY SENSOR SHALL TURN LIGHTS ON TO 100% LIGHTING LEVEL, MASTER CLOCK TO TURN OFF LIGHTS AFTER SCHEDULED TIME. SEE RELAY PANEL SCHEDULE FOR MORE PROGRAMMING REQUIREMENTS.	

COMMONS

ALL ON
AV MODE
RAISE
LOWER
ALL OFF

WALLSTATION 'LC5' CONFIGURATION	
ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ON ALL RELAYS WITHIN THE COMMONS, ALL DIMMING ZONES TO 100%.
AV MODE	BUTTON SHALL TOGGLE ON/OFF LIGHTING WITHIN THE LEARNING STAIR, DIMMING ZONES TO 50%.
RAISE	PRESS AND HOLD - INCREASE ALL DIMMING ZONES LEVELS WITHIN THE LEARNING STAIRS
LOWER	PRESS AND HOLD - DECREASE ALL DIMMING ZONES LEVELS WITHIN THE LEARNING STAIR
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF WITHIN THE LEARNING STAIR
CONTROL SEQUENCE	
ALL LIGHTS CONTROLLED BY THE BUILDING RELAY PANELS SHALL BE PROGRAMMED TO MEET THE REQUIREMENTS OF THE IECC 2018. INTERIOR AND EXTERIOR LIGHTING SHALL BE SCHEDULED TO BE TURNED ON/OFF AT SCHEDULED TIMES. COORDINATE WITH OWNER FOR EXACT SCHEDULING REQUIREMENTS. WALLSTATION 'LC1' SHALL BE UTILIZED TO OVERRIDE PROGRAMMED SCHEDULES AS NEEDED. OVERRIDE TO LAST UP TO 4 HOURS.	

GENERAL DIAGRAM NOTES:

1. ALL PROGRAMING SHALL MEET THE REQUIREMENTS OF THE IECC 2021 OR CURRENT ENERGY CODE APPLIED TO THE PROJECT.
2. THE LIGHTING CONTROLS AS SHOWN ARE BASED UPON COOPER LIGHTING CONTROLS. PRIOR APPROVAL IS REQUIRED BEFORE BIDDING THIS PROJECT. SEE PRIOR APPROVAL NOTES.
3. COORDINATE ALL INSTALLATION REQUIREMENTS, CONNECTIONS AND CABLE TYPE WITH THE SUPPLIER PRIOR TO ANY INSTALLATION.
4. PROVIDE DAYLIGHT ZONE CONTROL REQUIREMENTS PER C405.2.2.3.
5. PROVIDE INTUITIVE BUTTON LABELING TO MATCH APPLICATION AND LOAD/RELAY CONTROLS. PROVIDE FACTORY ENGRAVED LABELING FOR ALL INDIVIDUAL PUSH-BUTTONS. DEVICE AND COVERPLATE COLORS AS SELECTED BY ARCHITECT.
6. PROGRAM OF ALL LIGHTING CONTROL SYSTEMS AS INDICATED AND/OR AS DIRECTED BY THE ELECTRICAL ENGINEER AND/OR OWNER. MEET WITH THE ELECTRICAL ENGINEER AT THEIR OFFICE PRIOR TO PREPARATION OF SHOP DRAWINGS TO DISCUSS SPECIFIC PROGRAMMING AND ZONING REQUIREMENTS OF SYSTEM(S). EACH NETWORKED OR STANDALONE SYSTEM SHALL BE PROGRAMMED TO REVERT BACK TO ITS NORMAL POSITION ONE HOUR AFTER SELECTING A SCENE OR RAISING OR LOWERING A LIGHTING ZONE.
7. MANUFACTURER'S REPRESENTATIVE FOR DIVISION 26 LIGHTING CONTROLS SHALL BE ACCOUNTABLE FOR THE COMPREHENSIVE LIGHTING CONTROLS PACKAGE'S FINALIZATION IN ALIGNMENT WITH THE DESIGN INTENT DEPICTED IN THE DRAWINGS AND SPECIFICATIONS AND COMPLYING WITH IECC 2021 REQUIREMENTS. THE LIGHTING REPRESENTATIVE IS REQUIRED TO DEVELOP DETAILED SHOP DRAWINGS DEMONSTRATING THE LIGHTING CONTROL SYSTEM'S TOPOLOGY AND THE ESSENTIAL CONNECTIONS NECESSARY FOR ITS PROPER FUNCTIONING. LIGHTING CONTROL DEVICES SHOWN ARE TO PROVIDE GENERAL INTENT ONLY. MANUFACTURE'S REPRESENTATIVE TO PROVIDE ALL ADDITIONAL DEVICES AND MODIFY DEVICE LOCATIONS AS REQUIRED TO MEET IECC 2021 REQUIREMENTS.

DIAGRAM S001 RELAY CONTROL PANEL WALLSTATION LAYOUTS & LIGHTING CONTROLS SEQUENCES

NTS

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LIGHTING DIAGRAMS

E420

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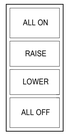
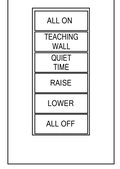


WALLSTATION 'RC1' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 100%.
RAISE	PRESS AND HOLD - BUTTON SHALL INCREASE ALL DIMMING ZONES LEVELS.
LOWER	PRESS AND HOLD - BUTTON SHALL DECREASE ALL DIMMING ZONES LEVELS.
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF.

CONTROL SEQUENCE

UPON ENTERING THE SPACE, OCCUPANCY SENSOR SHALL TURN LIGHTS ON TO 50% LIGHTING LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE THE DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

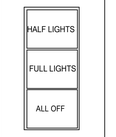


WALLSTATION 'RC2' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ON ALL LIGHTING RELAYS, ALL DIMMING ZONES TO 80% WHEN TOGGLED ON.
TEACHING WALL	BUTTON SHALL TURN OFF RELAYS NEAR TEACHING WALL/AV SCREEN, TOGGLE ALL DIMMERS TO 20%.
QUIET TIME	BUTTON SHALL PUT ALL DIMMING ZONES TO 40%.
RAISE	PRESS AND HOLD - BUTTON SHALL INCREASE ALL DIMMING ZONES LEVELS.
LOWER	PRESS AND HOLD - BUTTON SHALL DECREASE ALL DIMMING ZONES LEVELS.
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF.

CONTROL SEQUENCE

UPON ENTERING THE SPACE, OCCUPANCY SENSOR SHALL TURN LIGHTS ON TO 50% LIGHTING LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE THE DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS.OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

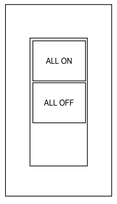


WALLSTATION 'RC3' CONFIGURATION

ENGRAVING	PROGRAMMING
HALF LIGHTS	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 50%.
FULL LIGHTS	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 100%.
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF.

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

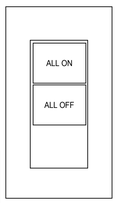


WALLSTATION 'RC4' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 100%.
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF.

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE OCCUPANT MUST TURN THE LIGHTING ON MANUALLY. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

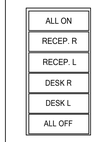


WALLSTATION 'RC4A' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 100%.
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF.

CONTROL SEQUENCE

UPON ENTERING THE SPACE, OCCUPANCY SENSOR SHALL TURN LIGHTS ON TO 50% LIGHTING LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE THE DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

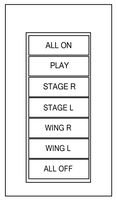


WALLSTATION 'RC5' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TOGGLE ON RELAYS a, b, AND c
RECEP. R	BUTTON SHALL RAISE RELAY b AND c
RECEP. L	BUTTON SHALL LOWER RELAY b AND c
DESK R	BUTTON SHALL RAISE RELAY c ABOVE RECEPTION DESK
DESK L	BUTTON SHALL DIM RELAY c ABOVE REPECTION DESK
ALL OFF	BUTTON SHALL TOGGLE OFF ALL RELAYS

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

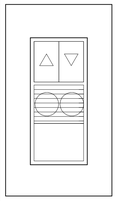


WALLSTATION 'RC6' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TOGGLE ON RELAYS e AND f
PLAY	BUTTON SHALL TURN OFF RELAY f AND DIM RELAY e TO 10%
STAGE R	BUTTON SHALL RAISE RELAY f
STAGE L	BUTTON SHALL DIM RELAY f
WING R	BUTTON SHALL RAISE RELAY e
WING L	BUTTON SHALL DIM RELAY e
ALL OFF	BUTTON SHALL TOGGLE OFF ALL RELAYS

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

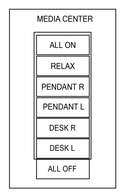


WALL SWITCH 'D' CONFIGURATION

ENGRAVING	PROGRAMMING
ON/OFF	BUTTON SHALL TOGGLE ON/OFF LIGHTING LOAD.
RAISE	PRESS AND HOLD - BUTTON SHALL INCREASE LIGHT LEVELS
LOWER	PRESS AND HOLD - BUTTON SHALL DECREASE LIGHT LEVELS

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT. DISABLE PHOTOCELL/ADAPTIVE DAYLIGHT HARVESTING MODE IN ROOMS THAT DO NOT REQUIRE DAYLIGHTING. PROVIDE 0-10V WIRING TO CONTROLLED FIXTURES ACCORDINGLY.

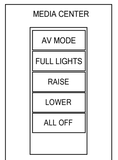


WALLSTATION 'RC7' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ALL RELAYS a:n, ALL DIMMING ZONES TO 100%
RELAX	BUTTON SHALL TURN ALL RELAYS a:n, ALL DIMMING ZONES TO 50%
PENDANT R	BUTTON SHALL RAISE RELAY a
PENDANT L	BUTTON SHALL DIM RELAY a
DESK R	BUTTON SHALL RAISE RELAY a AND b
DESK L	BUTTON SHALL DIM RELAY a AND b
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF.

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

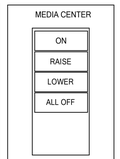


WALLSTATION 'RC8' CONFIGURATION

ENGRAVING	PROGRAMMING
AV MODE	BUTTON SHALL TURN OFF RELAYS f AND h AND DIM RELAY e AND d TO 75%.
FULL LIGHTS	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 100%.
RAISE	BUTTON SHALL RAISE RELAY f AND h
LOWER	BUTTON SHALL DIM RELAY f AND h
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF.

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

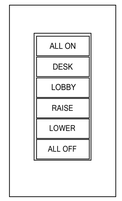


WALLSTATION 'RC9' CONFIGURATION

ENGRAVING	PROGRAMMING
ON	BUTTON SHALL TURN ON RELAY g:c
RAISE	BUTTON SHALL RAISE RELAY g:c
LOWER	BUTTON SHALL DIM RELAY g:c
ALL OFF	BUTTON SHALL TURN OFF RELAY g:c

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

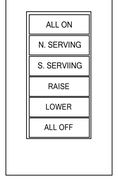


WALLSTATION 'RC11' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 100%.
DESK	BUTTON SHALL TOGGLE ON/OFF DESK AREA LINEARS AND DOWNLIGHTS LIGHT FIXTURES.
LOBBY	BUTTON SHALL TOGGLE ON/OFF 2X2s LIGHT FIXTURES.
RAISE	PRESS AND HOLD - BUTTON SHALL INCREASE ALL DIMMING ZONES LEVELS.
LOWER	PRESS AND HOLD - BUTTON SHALL DECREASE ALL DIMMING ZONES LEVELS.
ALL OFF	BUTTON SHALL TURN ALL LIGHTING LOADS OFF.

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

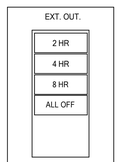


WALLSTATION 'RC12' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 100%.
N. SERVING	BUTTON SHALL TOGGLE ON/OFF RELAYS a
S. SERVING	BUTTON SHALL TOGGLE ON/OFF RELAYS b
RAISE	PRESS AND HOLD - BUTTON SHALL INCREASE ALL DIMMING ZONES LEVELS.
LOWER	PRESS AND HOLD - BUTTON SHALL DECREASE ALL DIMMING ZONES LEVELS.
ALL OFF	BUTTON SHALL TOGGLE OFF ALL RELAYS

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

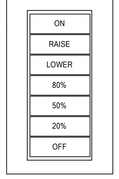


WALLSTATION 'RC0' CONFIGURATION

ENGRAVING	PROGRAMMING
2 HOUR	BUTTON SHALL TURN ON ALL EXTERIOR OUTLETS FOR 2 HOURS DURING AFTER HOURS OPERATION
4 HOUR	BUTTON SHALL TURN ON ALL EXTERIOR OUTLETS FOR 4 HOURS DURING AFTER HOURS OPERATION
8 HOUR	BUTTON SHALL TURN ON ALL EXTERIOR OUTLETS FOR 8 HOURS DURING AFTER HOURS OPERATION
ALL OFF	BUTTON SHALL TURN OFF ALL EXTERIOR OUTLETS DURING AFTER HOURS OPERATION

CONTROL SEQUENCE

EXTERIOR RECEPTACLES TO BE RAN THROUGH BUILDING LIGHTING CONTROL RELAY PANEL. PROGRAM OUTLET SCHEDULES PER OWNER REQUEST. BUTTONS SHALL TURN OUTLETS ON AFTER HOURS FOR INDICATED AMOUNT OF TIME.



WALLSTATION 'RC10' CONFIGURATION

ENGRAVING	PROGRAMMING
ALL ON	BUTTON SHALL TURN ALL LIGHTING RELAYS ON, ALL DIMMING ZONES TO 100%.
RAISE	PRESS AND HOLD - BUTTON SHALL INCREASE ALL DIMMING ZONES LEVELS.
LOWER	PRESS AND HOLD - BUTTON SHALL DECREASE ALL DIMMING ZONES LEVELS.
80%	BUTTON SHALL PUT ALL DIMMING ZONES TO 80%.
50%	BUTTON SHALL PUT ALL DIMMING ZONES TO 50%.
20%	BUTTON SHALL PUT ALL DIMMING ZONES TO 20%.
ALL OFF	BUTTON SHALL TOGGLE OFF ALL RELAYS

CONTROL SEQUENCE

UPON ENTERING THE SPACE, THE INTEGRAL OCCUPANCY SENSOR SHALL TURN LIGHTING ON TO 50% LIGHT LEVEL. OCCUPANT THEN CAN SET LIGHT LEVELS BASED UPON AVAILABLE SCENES. SET DIMMING TRIM LEVELS BASED UPON 40 FC AVERAGE AND PER THE ENGINEERS REVIEW. IF APPLICABLE, THE INTEGRAL DAYLIGHT SENSOR SHALL ADJUST LIGHT LEVELS IN THE DAYLIGHTING CONTROL ZONE BASED ON AVAILABLE NATURAL LIGHT LEVELS. OCCUPANCY SENSOR WILL TURN OFF LIGHTS AFTER VACANCYTIME OUT.

DIAGRAM S002 — ROOM CONTROLLER TYPE WALLSTATION LAYOUTS & LIGHTING CONTROLS SEQUENCES

NTS

GENERAL DIAGRAM NOTES:

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2. THE LIGHTING CONTROLS AS SHOWN ARE BASED UPON COOPER LIGHTING CONTROLS. PRIOR APPROVAL IS REQUIRED BEFORE BIDDING THIS PROJECT. SEE PRIOR APPROVAL NOTES.
3. COORDINATE ALL INSTALLATION REQUIREMENTS, CONNECTIONS AND CABLE TYPE WITH THE SUPPLIER PRIOR TO ANY INSTALLATION.
4. PROVIDE DAYLIGHT ZONE CONTROL REQUIREMENTS PER C405.2.2.3.
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6. PROGRAM OF ALL LIGHTING CONTROL SYSTEMS AS INDICATED AND/OR AS DIRECTED BY THE ELECTRICAL ENGINEER AND/OR OWNER. MEET WITH THE ELECTRICAL ENGINEER AT THEIR OFFICE PRIOR TO PREPARATION OF SHOP DRAWINGS TO DISCUSS SPECIFIC PROGRAMMING AND ZONING REQUIREMENTS OF SYSTEM(S). EACH NETWORKED OR STANDALONE SYSTEM SHALL BE PROGRAMMED TO REVERT BACK TO ITS NORMAL" POSITION ONE HOUR AFTER SELECTING A SCENE OR RAISING OR LOWERING A LIGHTING ZONE.
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SALT LAKE ST. GEORGE

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LIGHTING DIAGRAMS

E421

11/6/2023 7:00:49 PM

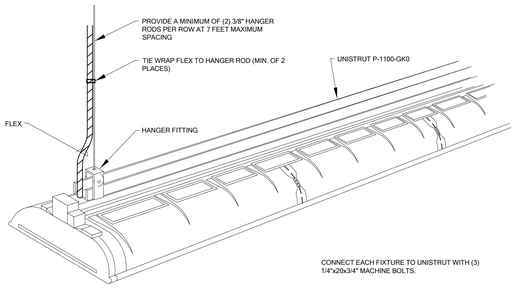
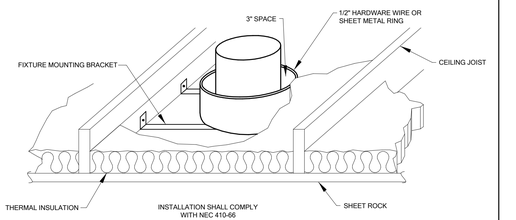


DIAGRAM A010 FIXTURE MOUNTING

NTS



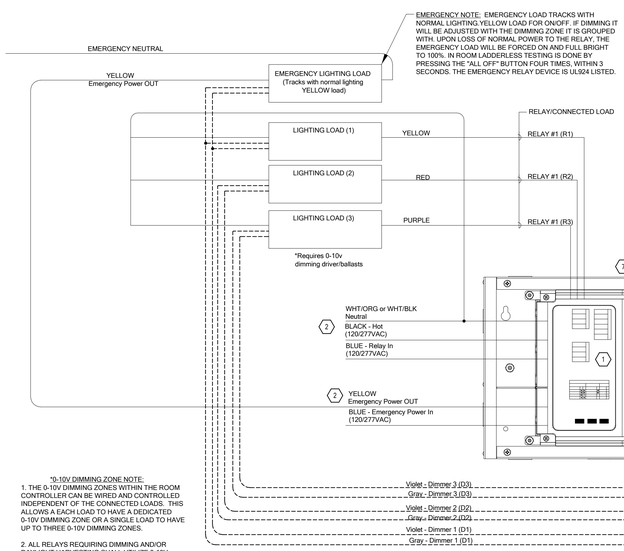
NOTE:
THIS REQUIREMENT IS FOR ALL DOWN LIGHT FIXTURES THAT ARE NOT 'IC' RATED

DIAGRAM A013 RECESSED DOWN LIGHT

NTS

GENERAL DIAGRAM NOTES:

1. THE LIGHTING CONTROLS AS SHOWN ARE BASED UPON EATON LIGHTING CONTROLS. PRIOR APPROVAL IS REQUIRED BEFORE BIDDING THIS PROJECT. ANY SYSTEM DIFFERENT FROM EATON THAT REQUIRES ADDITIONAL RELAYS NOT SHOWN ON PLANS DUE TO LACK OF SEPARATION OF RELAYS AND DIMMING ZONES MUST BE ACCOUNTED FOR AND PROVIDED IN THE BID AND MUST FUNCTION AS SIMILAR TO THAT WHICH IS REQUIRED IN FINAL INSTALLATION.
2. EXACT SPACE LAYOUTS VARY. SEE PLANS FOR APPROXIMATE EQUIPMENT LOCATIONS AND QUANTITY.
3. ALL ROOM CONTROLLERS SHALL ALLOW FOR TYPICAL 0-10V DIMMING, DAYLIGHT HARVESTING AND OCCUPANCY SENSING. INDEPENDENT DIMMING AND OVERRIDE OF EACH ZONE IS REQUIRED.
4. EACH ROOM CONTROLLER SHALL BE ABLE TO BE INDEPENDENTLY PROGRAMMED ON-SITE.
5. PROVIDE EMERGENCY LIGHTING CONTROL UNIT IN ROOMS/AREAS THAT SHOW EMERGENCY LIGHTING BEING CONTROLLED IN CONJUNCTION WITH NORMAL LIGHTING.
6. ALL CEILING-MOUNTED OCCUPANCY SENSORS SHALL BE PROVIDED WITH AN AUXILIARY CONTACT FOR HVAC CONTROL.
7. PROVIDE A UL 924 RELAY AS SPECIFIED FOR AUTOMATIC EMERGENCY LIGHTING CONTROL. THE UL 924 RELAY AUTOMATICALLY TRACKS WITH RELAY 1 AND CAN BE CONNECTED TO ANY OF THE THREE 0-10V DIMMERS. THE UL 924 RELAY AUTOMATICALLY CLOSES AND DISCONNECTS THE 0-10V CONTROL OPEN LOSS OF NORMAL POWER PROVIDING ADEQUATE EGRESS LIGHTING CONTROL. LADDERLESS MAINTENANCE TESTING OF THE UL 924 RELAY CAN BE ACHIEVED BY PRESSING THE ALL OFF BUTTON FOUR TIMES.
8. ALL LOW VOLTAGE WIRE/CABLE FOR LIGHTING SENSORS, INTERCOM, AUDIO/VISUAL EQUIPMENT, CLASSROOM SOUND AMPLIFICATION, ETC. TO BE PROPERLY SUPPORTED PER THE TELE/DATA SPEC, NEC 800.12/300.11 .AND AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORTS NOT ALLOWED.



*0-10V DIMMING ZONE NOTE:
1. THE 0-10V DIMMING ZONES WITHIN THE ROOM CONTROLLER CAN BE WIRED AND CONTROLLED INDEPENDENT OF THE CONNECTED LOADS. THIS ALLOWS A EACH LOAD TO HAVE A DEDICATED 0-10V DIMMING ZONE OR A SINGLE LOAD TO HAVE UP TO THREE 0-10V DIMMING ZONES.

2. ALL RELAYS REQUIRING DIMMING AND/OR DAYLIGHT HARVESTING SHALL UTILIZE 0-10V DIMMING. PROVIDE 0-10V DIMMING WIRING AND CONTROLS AS REQUIRED.

DIAGRAM S003 TYPICAL ROOM CONTROLLER, DAYLIGHTING, 0-10V DIMMING, 1, 2, 3, EM RELAY

NTS

KEYED NOTES:

1. EXACT ROOM CONTROLLER MODEL WILL VARY. PROVIDE THE CORRECT ROOM CONTROLLER MODEL BASED UPON WHAT IS SHOWN ON PLANS AND WHAT IS REQUIRED FOR PROPER LIGHTING CONTROL SEQUENCING.
2. SEE LIGHTING PLANS FOR BRANCH CIRCUIT REQUIREMENTS.
3. PROVIDE DAYLIGHT ZONE CONTROL REQUIREMENTS PER IECC-2021 C405 LOCATE DAYLIGHT SENSOR(S) PER MANUFACTURER'S RECOMMENDATION AND WHERE REQUIRED WITHIN THE ROOM FOR PROPER COVERAGE. PROVIDE ADDITIONAL DIMMING ZONES/RELAYS AND WIRING TO CONTROL THE DAYLIGHTING ZONE SEPARATE FROM THE FIXTURES OUTSIDE THE DAYLIGHT ZONE.
4. PROVIDE DUAL TECH. OCCUPANCY SENSOR(S) AS SHOWN. LOCATE OCCUPANCY SENSOR(S) PER MANUFACTURER FOR PROPER PLACEMENT AND ADJUSTMENT OF OCCUPANCY SENSORS. PROVIDE ADDITIONAL SENSORS IF REQUIRED TO PROPERLY COVER THE RESPECTIVE ROOM.
5. PROVIDE LOW VOLTAGE WALLSTATION AS SEE DIAGRAM FOR WALLSTATION LAYOUT AND CONFIGURATION.
6. IF INDICATED, SEE DRAWINGS FOR DIMMING ZONES REQUIRED e.g. 'D1', 'D2', 'D3'.
7. MOUNT ROOM CONTROLLER(S) ABOVE ENTRY DOOR ALONG WITH ANY OTHER RELATED DEVICES. PROVIDE INDICATOR LABELING ON CEILING TILE NEAREST THE ROOM CONTROLLER. COORDINATE WITH ARCHITECT FOR STYLE AND METHOD OF LABELING.
8. INTERIOR CLASSROOMS AND WHERE LOCATED ON ARCHITECTURAL PLANS, PROVIDE CONNECTION BETWEEN ADJUSTABLE SKYLIGHTS AND ROOM CONTROLLERS ONBOARD CONNECTION FOR OPERATION OF ADJUSTABLE SKYLIGHT MOTORS. THE ADJUSTABLE SKYLIGHT WILL AUTOMATICALLY OPEN AND CLOSE BASED ON SIGNALS RECEIVED FROM THE ROOM CONTROLLER. SKYLIGHTS SHALL BE INTERFACED WITH DIMMING, LOUVER SHALL AUTOMATICALLY BE CONTROLLED BASED ON THE LIGHTING WALLSTATIONS AND LIGHT SENSORS USED IN THE ROOM.
9. PROVIDE OCCUPANCY SENSOR WITH AN ADDITIONAL SET OF DRY CONTACTS FOR HVAC CONTROL AT EACH VAV BOX LOCATION. COORDINATE WITH MECHANICAL DRAWINGS AND THE MECHANICAL CONTRACTOR FOR EXACT LOCATIONS.

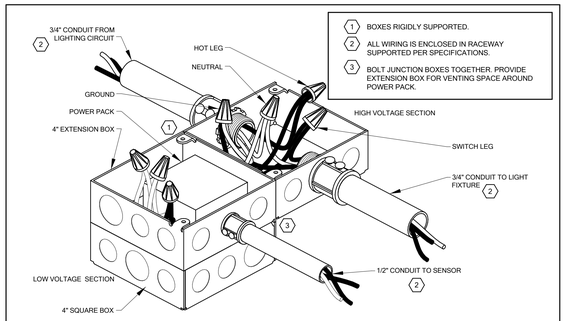


DIAGRAM S016 OCCUPANCY SENSOR POWER PACK

NTS

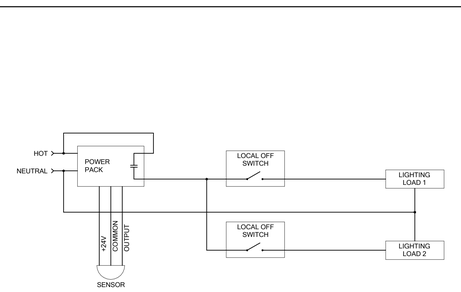


DIAGRAM S007 SENSOR CONTROLLING DUAL LEVEL LIGHTING

NTS

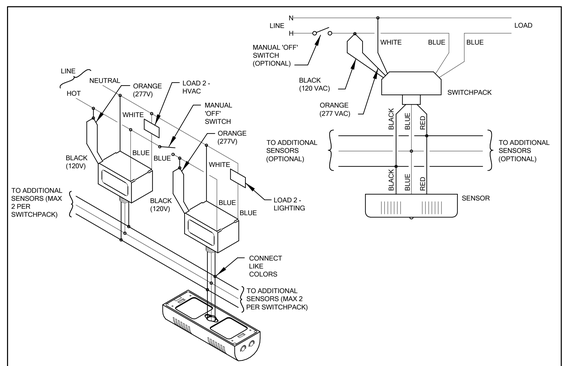


DIAGRAM R007 OCCUPANCY SENSOR WIRING DIAGRAM

NTS

TYPICAL INSTALLATION FOR ELECTRICAL SYSTEMS

NOTES:
1. FREE AIR CABLE SHALL BE CLASSIFIED PLENUM RATED 2 CONDUCTOR 18 OR 16 AWG SOLID, TWISTED, AND UNSHIELDED CABLE NEC TYPE CMP AND CEC TYPE CMP FT6. SPECIAL COLOR CODE SPECIFIC TO LOW VOLTAGE BALLAST/DRIVER 0-10V WIRING PROTOCOL. PRODUCT SHALL BE MANUFACTURED TO BE IN COMPLIANT WITH THE REQUIREMENTS OF UL444 FOR INSTALLATIONS AND APPLICATIONS IN ACCORDANCE WITH NEC ARTICLES 725 AND 800.
2. FREE AIR CABLE SHALL BE INSTALLED IN A CLEAN AND CRAFTMANSHIP-LIKE MANNER. SUPPORT AT 5'-0" INTERVALS ALONG THE PATH OF THE ACCOMPANYING BRANCH CIRCUIT LIGHTING RACEWAY. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED.
3. UTILIZE 18 AWG GAUGE WIRE FOR DISTANCES UP TO 300' AND 16 AWG FOR DISTANCES UP TO 400'.
4. SUPPORT RACEWAYS RIGIDLY ATTACHED TO THE STRUCTURE AT INTERVALS NOT TO EXCEED 8' ON CENTER. PROVIDE A MINIMUM OF 2 SUPPORTS PER 10' OF RACEWAY. SUPPORT RACEWAY WITHIN 12" OF JUNCTION BOX, COUPLING, OUTLET, OR FITTING. PROVIDE RACEWAY SUPPORTS AT EACH 90 DEGREE BEND. REFER TO SPECIFICATION FOR MARE DETAILS.
5. LOCATE LIGHTING JUNCTION BOX WITHIN 3' OF LAY IN FIXTURE.
6. MAKE SPLICES OF 0-10V CABLES INSIDE OF JUNCTION BOXES

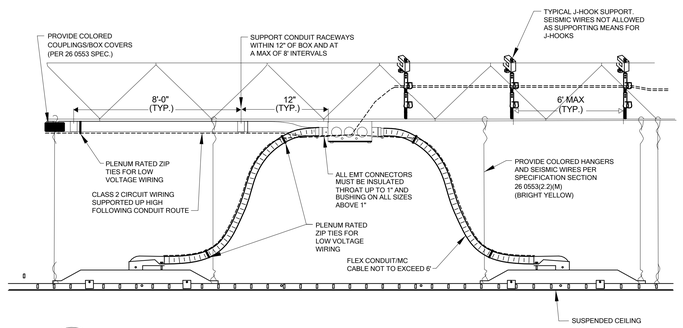


DIAGRAM A029 TYPICAL ABOVE CEILING ROUGH-IN

NTS

NOTES:
1. VERIFY DIMENSION WITH REQUIRED CLEARANCE FOR LIGHT FIXTURE FOR UNOBSTRUCTED MOVEMENT.
2. THEATRE LIGHT FIXTURES. SEE ELECTRICAL DRAWINGS.
3. POWER STRIP AND TRACK MOUNTED TO BOTTOM CHORD OF STEEL JOIST. SEE ELECTRICAL DRAWINGS.
4. STEEL PIPE 2" DIAMETER PIPE WITH REQUIRED THREADED FITTINGS. ATTACHED TO BOTTOM CHORD OF JOIST. PAINT ALL STEEL PIPE AND FITTINGS. BLACK IN COLOR.
5. STEEL JOIST. SEE STRUCTURAL DRAWINGS.
6. FASTEN PIPE TO BOTTOM CHORD OF JOIST WITH REQUIRED FITTINGS.
7. THREADED ELBOW FITTING.

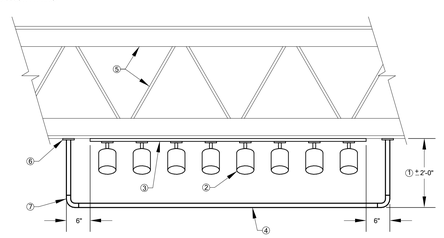


DIAGRAM A030 TYP. RECESSED FIXTURE MOUNTING

NTS

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD
130 N. ECCLES AVE., OGDEN, UT 84404
BID PACKAGE 5 - GENERAL CONSTRUCTION
LIGHTING DIAGRAMS

E422

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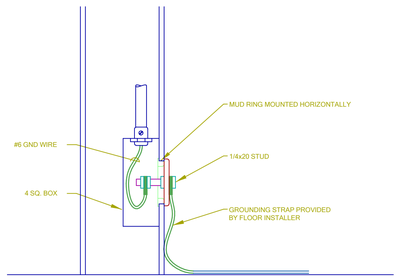

DIAGRAM F014 GROUNDING
NTS

NOTES:
1. PROVIDE 2-HOLE COMPRESSION LUGS AS REQUIRED.

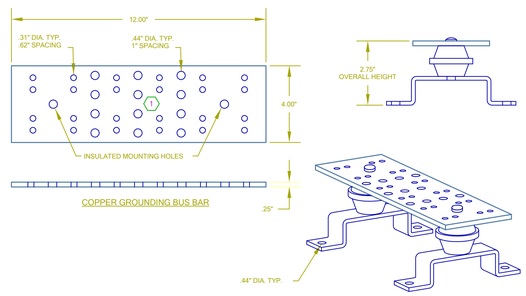

DIAGRAM F018 GROUNDING BUS BAR "TMGB"/"TGB"
NTS

NOTES:
1. PROVIDE 2-HOLE COMPRESSION LUGS AS REQUIRED.

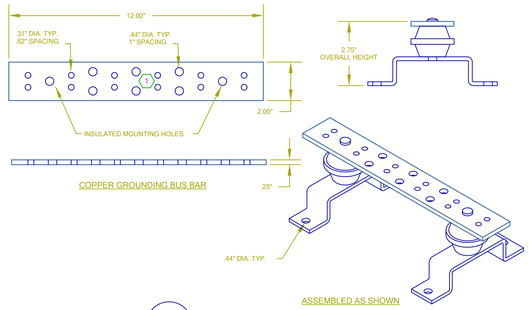

DIAGRAM F019 GROUNDING BUS BAR "IBT"
NTS

NOTES:
TMGB - TELECOMMUNICATIONS MAIN GROUNDING BUS.
IBT - INTERSYSTEM BONDING TERMINAL.
HC - HORIZONTAL CROSS-CONNECT ROOM.
MC - MAIN CROSS-CONNECT ROOM.
TGB - TELECOMMUNICATIONS GROUNDING BUS.
TBB - TELECOMMUNICATIONS BONDING BACKBONE.
BC - BONDING CONDUCTOR.
TR - TELECOMMUNICATIONS ROOM.
EF - ENTRANCE FACILITY.
MBJ - MAIN BONDING JUMPER
EGB - EQUIPMENT GROUNDING BUS

BC & TBB CONDUCTOR SIZE
≤ 25'-#4 CU
> 25' ≤ 50'-#1 CU
> 50' ≤ 75'-#2/0 CU
> 75'-#3/0 CU

1. SIZE PER NEC REQUIREMENTS.
2. PROVIDE INSULATED GROUNDING BUSHING.

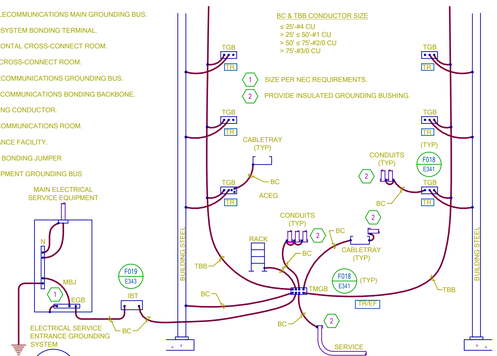

DIAGRAM F021 TYPICAL LARGE TELECOMMUNICATIONS SYSTEM GROUNDING/BONDING
NTS

MINIMUM SPACE REQUIREMENTS IN PULL BOX				
CONDUIT SIZE	WIDTH	LENGTH	DEPTH	ADDITIONAL WIDTH PER CONDUIT
1"	4"	16"	4"	2"
2"	8"	36"	4"	5"
3"	12"	48"	6"	6"
4"	16"	60"	8"	8"

NOTES:
1. MAXIMUM OF (2) 90° BENDS BETWEEN PULL BOXES (MAX DISTANCE BETWEEN PULL BOXES 100'.
2. ALL PULL BOXES SHALL BE INSTALLED IN STRAIGHT SECTION OF RACEWAY, NO TURNS ARE ALLOWED IN PULL BOX.

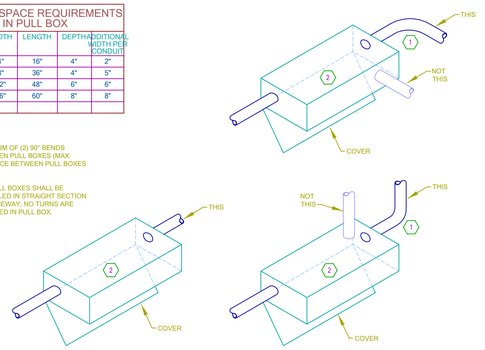

DIAGRAM F024 TELECOMMUNICATIONS PULL BOXES
NTS

NOTES:
TMGB - TELECOMMUNICATIONS MAIN GROUNDING BUS.
IBT - INTERSYSTEM BONDING TERMINAL.
BC - BONDING CONDUCTOR.
MBJ - MAIN BONDING JUMPER
EGB - EQUIPMENT GROUNDING BUS
TGB - TELECOMMUNICATIONS GROUNDING BUS

BC CONDUCTOR SIZE
≤ 25'-#4 CU
≤ 50'-#1 CU
≤ 75'-#2/0 CU
≥ #3/0 CU

NOTES:
1. SIZE PER NEC 250.66.
2. PROVIDE GROUNDING/BONDING SYSTEM CONNECTIONS TO MAIN ELECTRICAL SERVICE AT THE LOCATION OF THE THE MAIN SERVICE DISCONNECT.

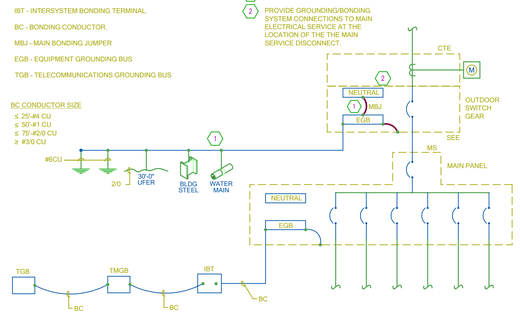

DIAGRAM F026 ELECTRICAL SERVICE GROUNDING/BONDING
NTS

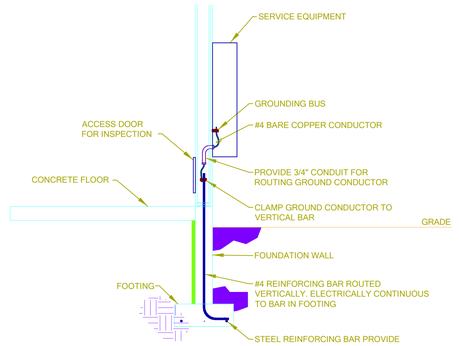

DIAGRAM F027 UFER GROUNDING
NTS

NOTES
1. SEAL CONDUIT AT FLOOR LINE FOR WATER TIGHT SEAL.

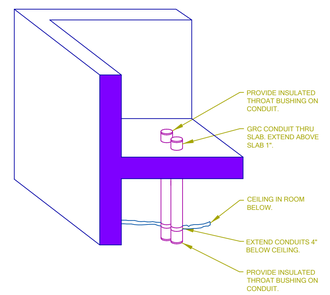

DIAGRAM F028 CONDUIT SLEEVES
NTS

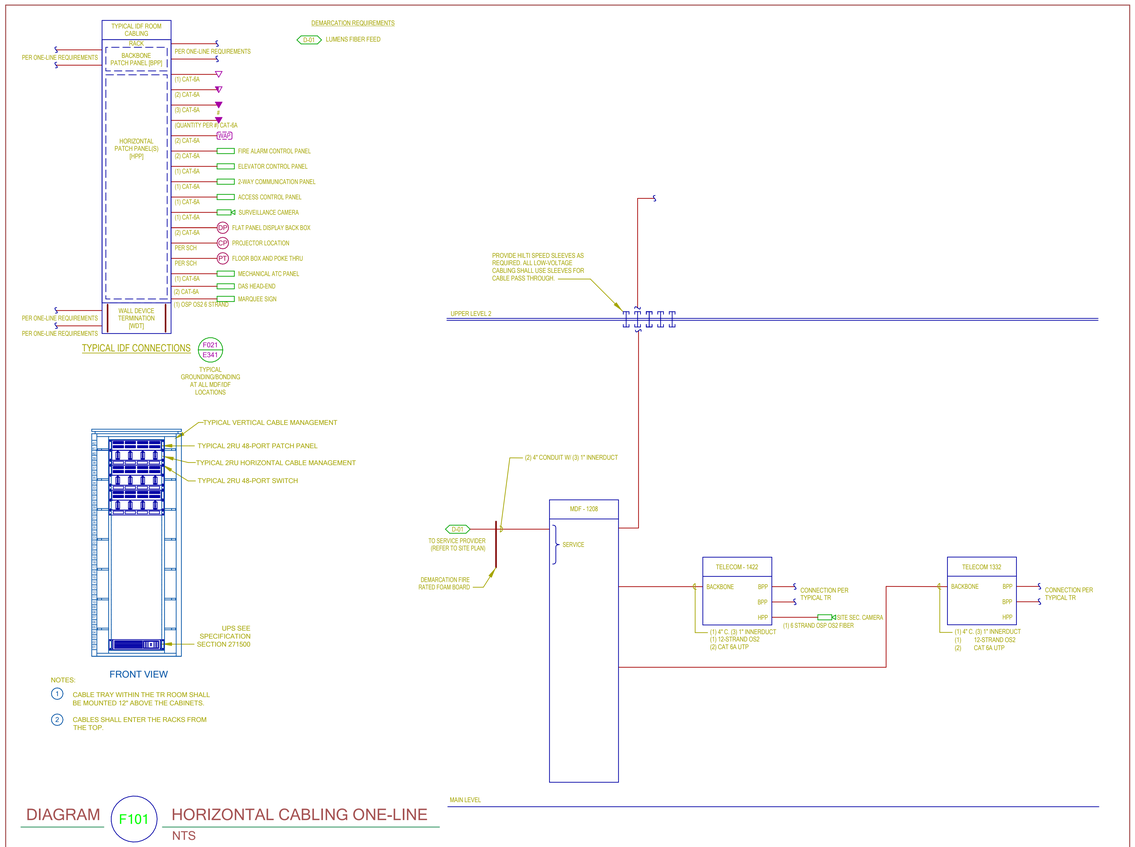

DIAGRAM F101 HORIZONTAL CABLING ONE-LINE
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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ELECTRICAL DIAGRAMS

E430

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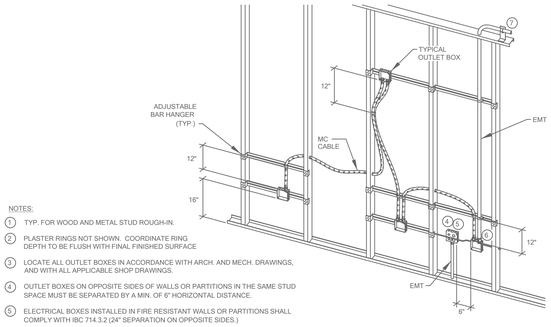


NOTES:

1. TYP. FOR WOOD AND METAL STUD ROUGH-IN.
2. PLASTER RINGS NOT SHOWN. COORDINATE RING DEPTH TO BE FLUSH WITH FINAL FINISHED SURFACE
3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCH. AND MECH. DRAWINGS, AND WITH ALL APPLICABLE SHOP DRAWINGS.
4. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS IN THE SAME STUD SPACE MUST BE SEPARATED BY A MIN. OF 6" HORIZONTAL DISTANCE.
5. ELECTRICAL BOXES INSTALLED IN FIRE RESISTANT WALLS OR PARTITIONS SHALL COMPLY WITH IBC 714.3.2 (24" SEPARATION ON OPPOSITE SIDES.)
6. INSULATED THROAT EMT CONNECTOR.
7. HOME RUN TO PANEL MUST BE IN RACEWAY.

DIAGRAM H013 TYPICAL ROUGH IN REQUIREMENTS FOR MC CABLE

NTS

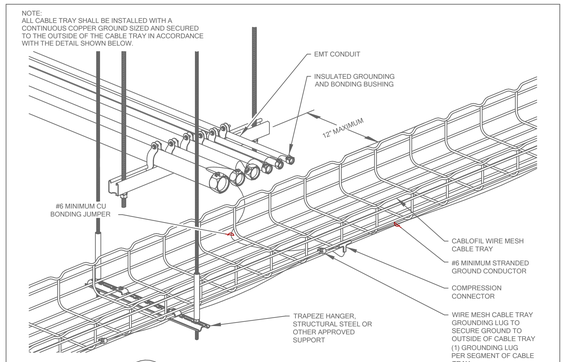


DIAGRAM I011 WIRE CABLE TRAY GROUNDING

NTS

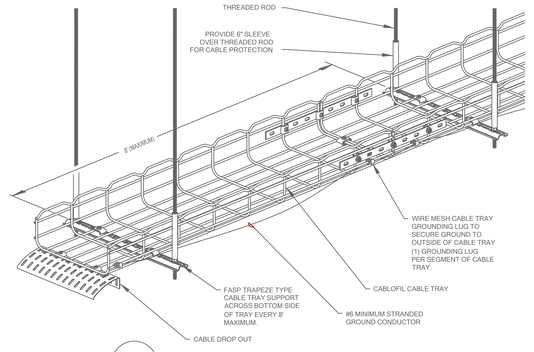


DIAGRAM I012 WIRE MESH CABLE TRAY TRAPEZE HANGING

NTS

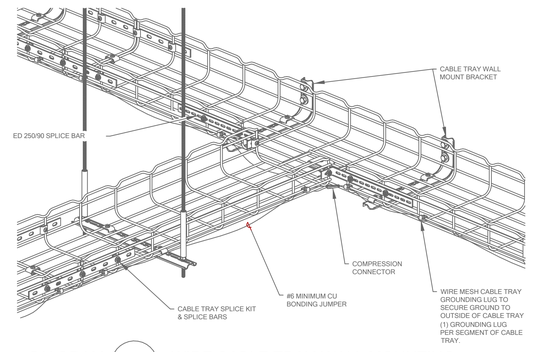
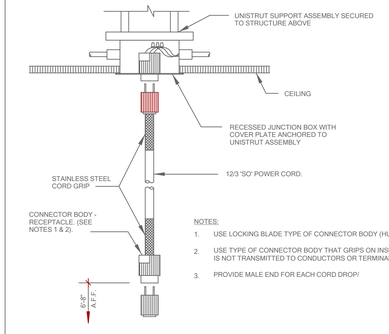


DIAGRAM I013 WIRE CABLE TRAY-WALL MOUNTING

NTS



NOTES:

1. USE LOCKING BLADE TYPE OF CONNECTOR BODY (HUBBELL 'TWIST LOCK' OR EQUAL).
2. USE TYPE OF CONNECTOR BODY THAT GRIPS ON INSULATION OF 'SO' CORD SO THAT TENSION IS NOT TRANSMITTED TO CONDUCTORS OR TERMINAL SCREWS.
3. PROVIDE MALE END FOR EACH CORD DROP/

DIAGRAM K001 TWIST LOCK CORD DROP

NTS

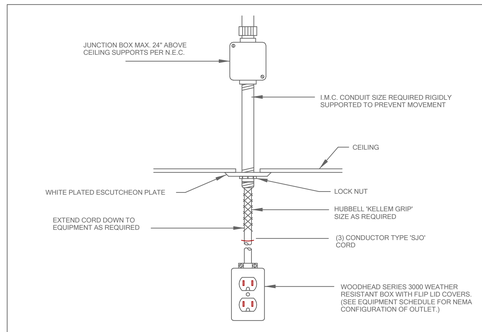
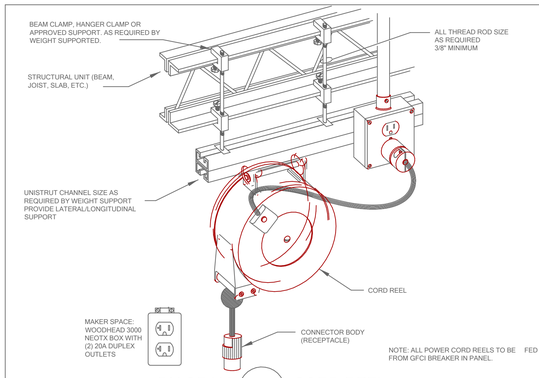


DIAGRAM K002 CORD DROP

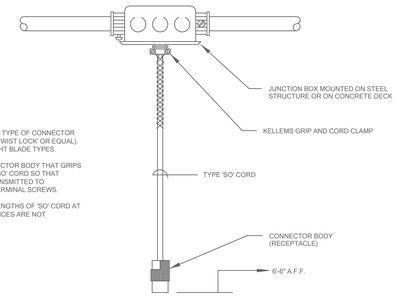
NTS



NOTE: ALL POWER CORD REELS TO BE FED FROM GFCI BREAKER IN PANEL.

DIAGRAM K003 CORD REEL

NTS



NOTES:

USE LOOKING BLADE TYPE OF CONNECTOR BODY (WOODHEAD 'TWIST LOCK' OR EQUAL). DO NOT USE STRAIGHT BLADE TYPES.

USE TYPE OF CONNECTOR BODY THAT GRIPS ON INSULATION OF 'SO' CORD SO THAT TENSION IS NOT TRANSMITTED TO CONDUCTORS OR TERMINAL SCREWS.

USE CONTINUOUS LENGTHS OF 'SO' CORD AT EACH LOCATION SPLICES ARE NOT PERMITTED.

DIAGRAM K004 CORD DROP

NTS

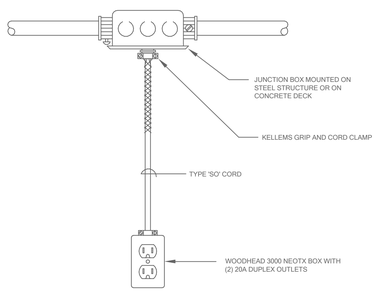


DIAGRAM K005 CORD DROP

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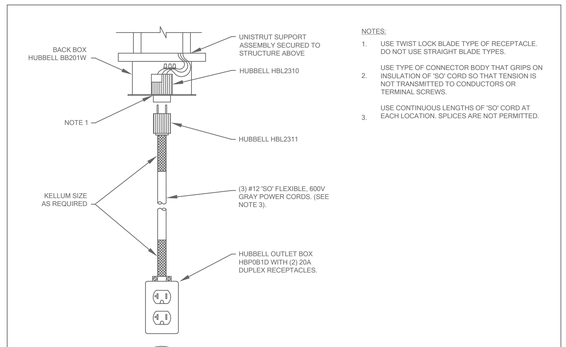

NOTES:

1. USE TWIST LOCK BLADE TYPE OF RECEPTACLE. DO NOT USE STRAIGHT BLADE TYPES.
2. USE TYPE OF CONNECTOR BODY THAT GRIPS ON INSULATION OF 'SO' CORD SO THAT TENSION IS NOT TRANSMITTED TO CONDUCTORS OR TERMINAL SCREWS.

   USE CONTINUOUS LENGTHS OF 'SO' CORD AT
3. EACH LOCATION. SPLICES ARE NOT PERMITTED.

DIAGRAM K007 TWIST LOCK CORD DROP

NTS

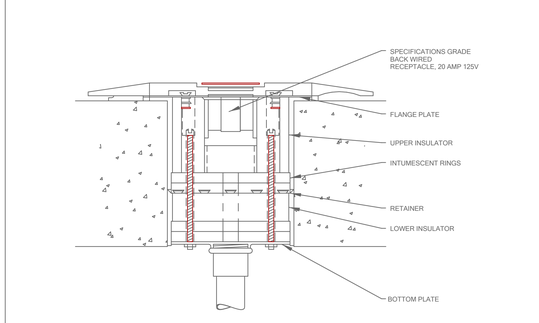

DIAGRAM L004 FIRE-RATED POKE-THRU

NTS

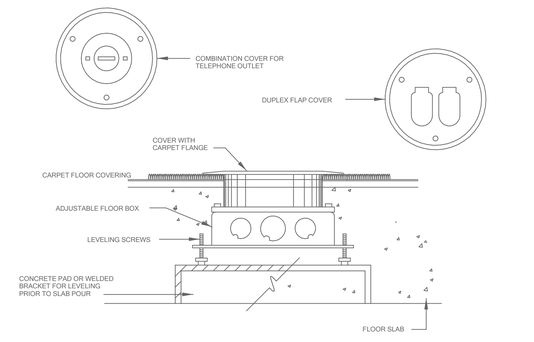

DIAGRAM L005 FLOOR BOX INSTALLATION ABOVE GRADE SLAB

NTS

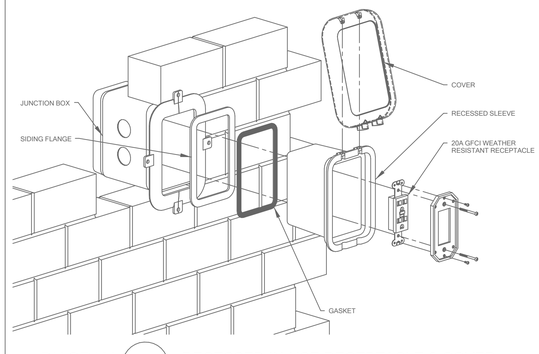

DIAGRAM L009 RECESSED IN-USE RECEPTACLE & COVER

NTS

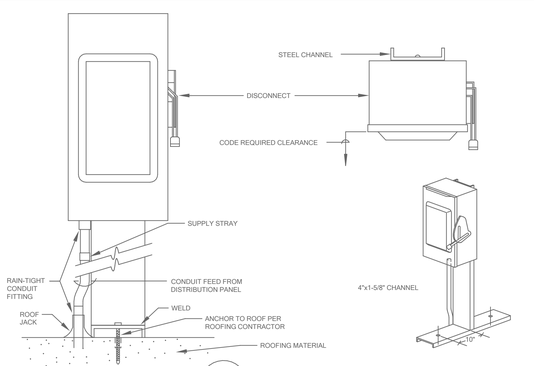

DIAGRAM M001 REMOTE DISCONNECT

NTS

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BID PACKAGE 5 - GENERAL CONSTRUCTION

ELECTRICAL DIAGRAMS

E431

11/6/2023 7:00:50 PM

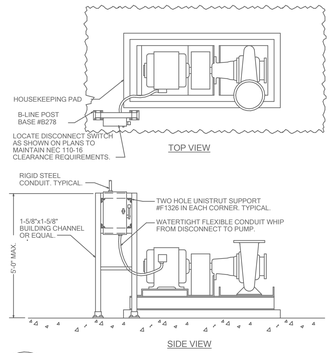

DIAGRAM M003 TYPICAL DISCONNECT SWITCH MOUNTING

NTS

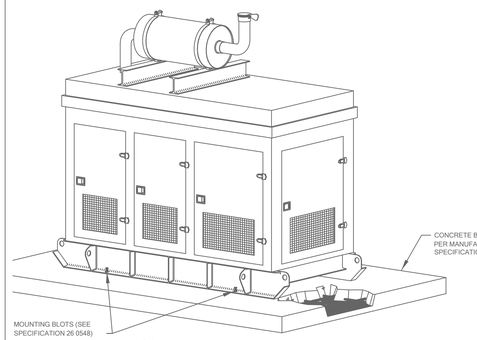

DIAGRAM N003 GENERATOR WITH COVER

NTS

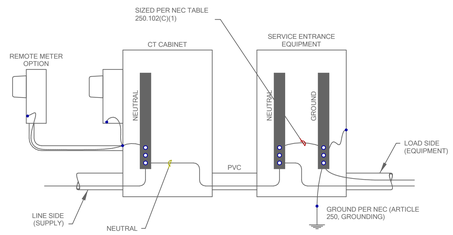

DIAGRAM Q007 SERVICE ENCLOSURE BONDING

NTS - 600 VOLT

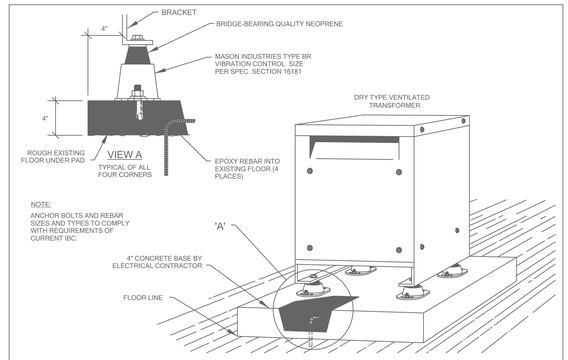

DIAGRAM Q009 DRY TYPE TRANSFORMER MOUNTING

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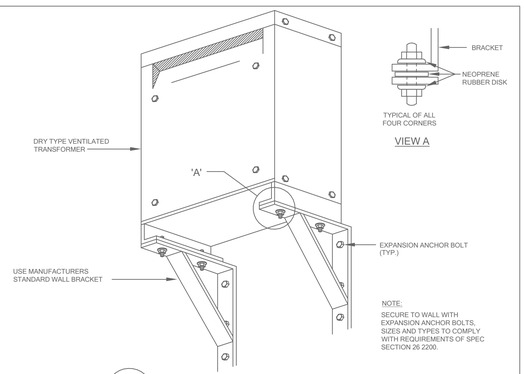

DIAGRAM Q002 TRANSFORMER WALL MOUNTING

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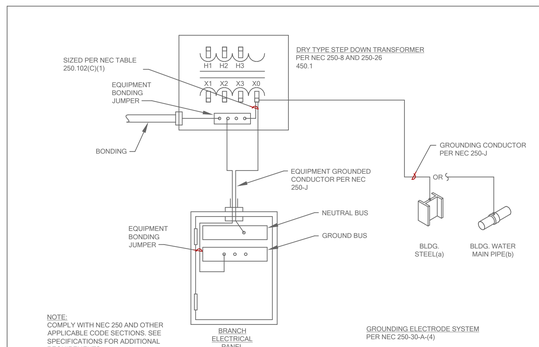

DIAGRAM Q011 STEP DOWN TRANSFORMER GROUNDING

NTS

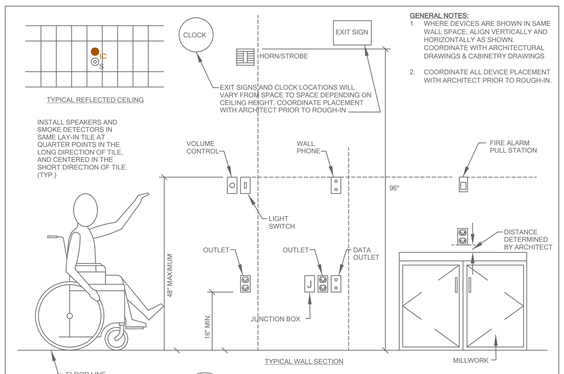

DIAGRAM R001 DEVICE MOUNTING HEIGHTS

NTS

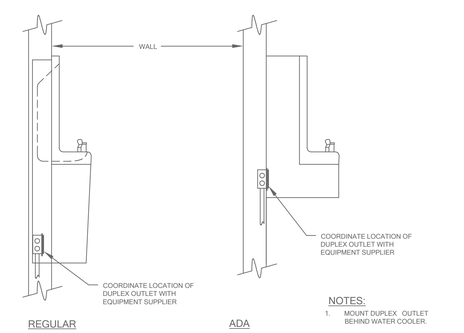

DIAGRAM R002 ELECTRIC WATER COOLER (EWC)

NTS

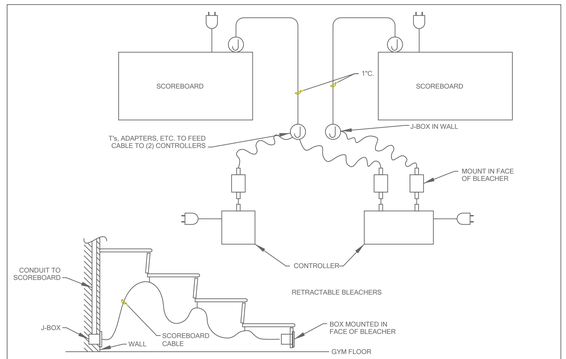

DIAGRAM R014 INDOOR SCOREBOARD DIAGRAM

NTS

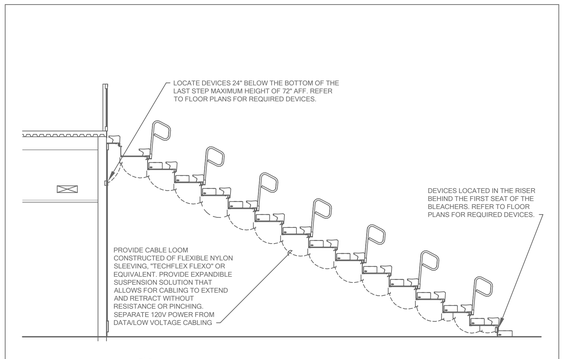

DIAGRAM R017 BLEACHER CABLE SUPPORT

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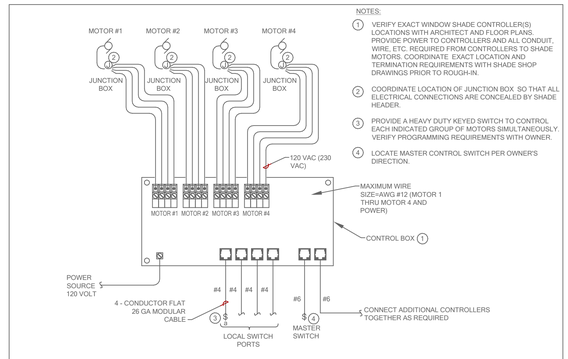

DIAGRAM Z001 MECHOSHADE WIRING DIAGRAM

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BID PACKAGE 5 - GENERAL CONSTRUCTION

ELECTRICAL DIAGRAMS

E432

11/6/2023 7:00:51 PM

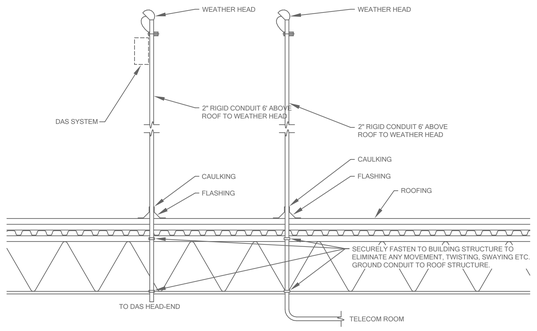


DIAGRAM G004 ANTENNA AND WEATHER STATION MOUNTING

NTS

GENERAL NOTES

1. COORDINATE WITH THE ROOFING CONTRACTOR TO PROVIDE APPROPRIATE ROOF JACK. THE JACK SHALL BE SIZED TO FIT TIGHTLY TO RACEWAY FOR WEATHER-TIGHT SEAL. COORDINATE WORK AND REQUIREMENTS UNDER ROOFING SECTION OF SPECIFICATIONS.
2. CONTRACTOR SHALL NOT INSTALL ELECTRICAL CONDUIT(S) THROUGH THE NEW MECHANICAL CURB AND/OR DUCTWORK. LOCATE ELECTRICAL CONDUITS A MINIMUM OF 12" AWAY FROM MECHANICAL CURB ALONG WITH MAINTAINING A MINIMUM OF 12" BETWEEN ANY OTHER CONDUIT AND ANY OTHER ROOF PENETRATION.
3. NO ELECTRICAL WIRES OF EITHER HIGH OR LOW VOLTAGE TO RUN INSIDE ANY CURBS.

NOTES:

1. PROVIDE SERVICE RECEPTACLE WITHIN 25' OF MECHANICAL UNIT. PROVIDE WEATHER RESISTANT GFCI DUPLEX AND INTERMATIC 1010MXD WEATHERPROOF COVER.
2. PROVIDE NEMA 3R DISCONNECT/STARTER AS REQUIRED. REFER TO SPECIFICATIONS FOR COORDINATION REQUIREMENTS WITH MECHANICAL SHOP DRAWINGS PRIOR TO RELEASING EQUIPMENT AND PERFORMING ROUGH-IN.

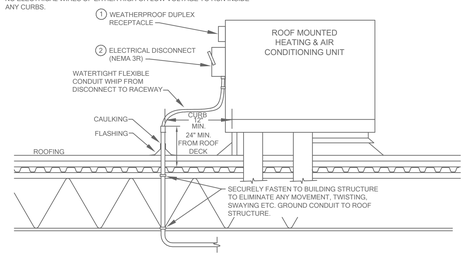


DIAGRAM G008 ROOF MOUNTED MECHANICAL EQUIPMENT ROUGH-IN REQUIREMENTS

NTS

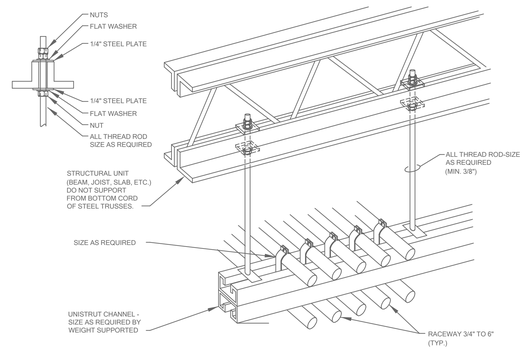


DIAGRAM H001 TYPICAL TRAPEZE CONDUIT RACK

NTS

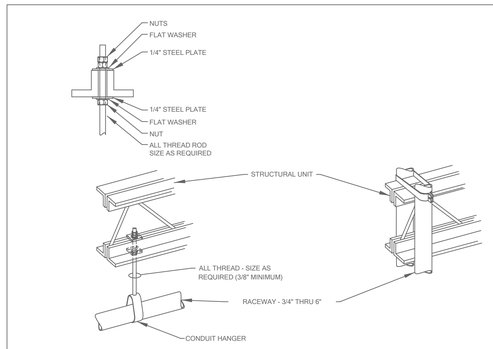
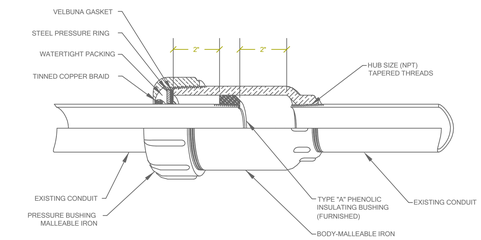


DIAGRAM H003 TYPICAL RACEWAY SUPPORT METHODS

NTS

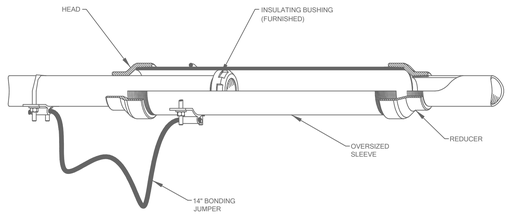


O-Z/GEDNEY 'TYPE AX'
FOR RIGID METAL CONDUIT

NOTE:
INSTALL CONDUIT TO ALLOW FOR 2" MOVEMENT IN EITHER DIRECTION FOR A TOTAL MOVEMENT OF 4".

DIAGRAM H011 IN SLAB EXPANSION FITTING

NTS

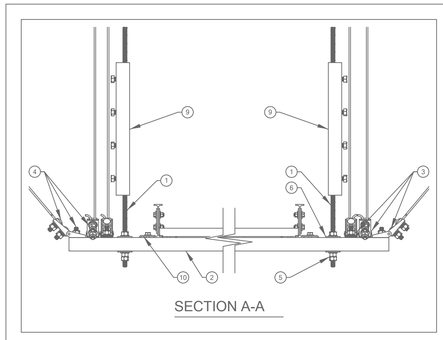


NOTE:
INSTALL CONDUIT TO ALLOW FOR 2" MOVEMENT IN EITHER DIRECTION FOR A TOTAL MOVEMENT OF 4".

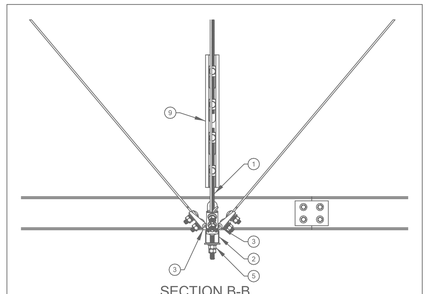
O-Z/GEDNEY 'TYPE EXPB'
FOR RIGID METAL CONDUIT & IMC

DIAGRAM H009 EXPANSION & PULL BOX FITTING

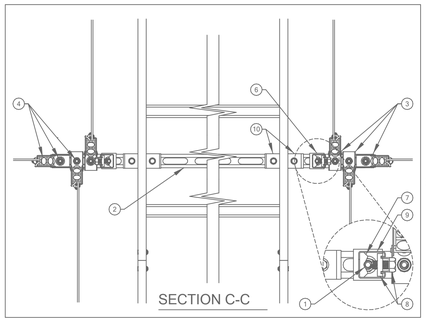
NTS



SECTION A-A



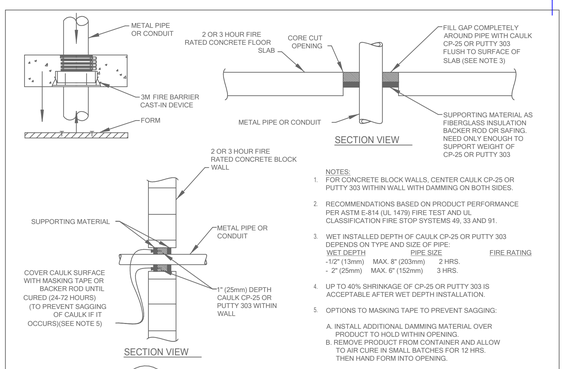
SECTION B-B



SECTION C-C

DIAGRAM H010 CONDUIT CROSSING SEISMIC JOINT

NTS



NOTES:

1. FOR CONCRETE BLOCK WALLS, CENTER CAULK CP-25 OR PUTTY 303 WITHIN WALL WITH DAMMING ON BOTH SIDES.
2. RECOMMENDATIONS BASED ON PRODUCT PERFORMANCE PER ASTM E-814 (UL 1479) FIRE TEST AND UL CLASSIFICATION FIRE STOP SYSTEMS 49, 33 AND 91.
3. WET INSTALLED DEPTH OF CAULK CP-25 OR PUTTY 303 DEPENDS ON TYPE AND SIZE OF PIPE:

WET DEPTH	PIPE SIZE	FIRE RATING
-1/2" (13mm)	MAX. 8" (203mm)	2 HRS.
- 2" (25mm)	MAX. 6" (152mm)	3 HRS.

4. UP TO 40% SHRINKAGE OF CP-25 OR PUTTY 303 IS ACCEPTABLE AFTER WET DEPTH INSTALLATION.
5. OPTIONS TO MASKING TAPE TO PREVENT SAGGING:

A. INSTALL ADDITIONAL DAMMING MATERIAL OVER PRODUCT TO HOLD WITHIN OPENING.
B. REMOVE PRODUCT FROM CONTAINER AND ALLOW TO AIR CURE IN SMALL BATCHES FOR 12 HRS. THEN HAND FORM INTO OPENING.

6. WHEN ANNULAR SPACE EXCEEDS 3/4" (19mm). A 28 AWG METAL COVER PLATE MUST BE MECHANICALLY SECURED ATOP THE 3M FIRE BARRIER APPLICATION, OR TIGHTLY PACK A NON-COMBUSTIBLE DAMMING MATERIAL ATOP INSTALLED CAULK OR PUTTY.

DIAGRAM H012 FIRE STOP

NTS

PARTS LIST

ITEM No.	DESCRIPTION	SIZE	CATALOG No. UNISTRUT
1	THREADED ROD (MIN. MODULUS OF OF ELASTICITY = 29x10 LBS/IN)	SEE SCHEDULE FOR DIAMETER	-
2	METAL FRAMING CHANNEL	1-5/8"x1-5/8"	P1000
3	CABLE BRACE SWIVEL ANCHOR	SEE TABLE	MASON IND. SCB-X
4	HEX HEAD CAP SCREW WITH SPRING NUT	1/2"-13"	HHCS/P1010
5	FLAT WASHER WITH HEX NUT	3/8"	-
6	FLAT PLATE FITTING WITH HEX NUT	3/8" OR 1/2" AS REQ'D	P1063 OR P1064
7	CRADLE	-	P2485
8	HEX HEAD CAP SCREW WITH NUT	3/8"x1"	HHCS/P2008
9	SLOTTED METAL FRAMING CHANNEL	1-5/8"x1-5/8"	P1000T
10	CABLE TRAY ATTACHMENT CLIP W/CAP SCREW & NUT	-	-

NOTES:

1. PROVIDE LONGITUDINAL AND LATERAL SUPPORT SPACING IN ACCORDANCE WITH THE FOLLOWING:

MAX CABLE TRAY PLUS CABLE WT.	VERTICAL SUPPORT SPACING	LATERAL SUPPORT SPACING	LONGITUDINAL SUPPORT SPACING	ROD DIAMETER	CABLE BRACE SWIVEL ANCHOR & CABLE
POUNDS/FOOT	FEET	FEET	FEET	INCHES	
25	10	10	20	.375	SCB2
50	10	10	20	.500	SCB3

2. PROVIDE METAL FRAMING CHANNEL ON ALL VERTICAL SUPPORTS WHEN ROD LENGTH EXCEEDS 14". STIFFENER CLIP SPACING SHALL BE 12".
3. SEE SPECIFICATIONS FOR APPROVED FITTINGS FOR ATTACHMENT TO STRUCTURE.

GENERAL NOTES

1. COORDINATE ROUTING OF CABLE TRAYS AND SUPPORT SYSTEMS WITH DIVISION 23.
2. DO NOT SUPPORT FROM BOTTOM CORD OF STEEL TRUSSES.

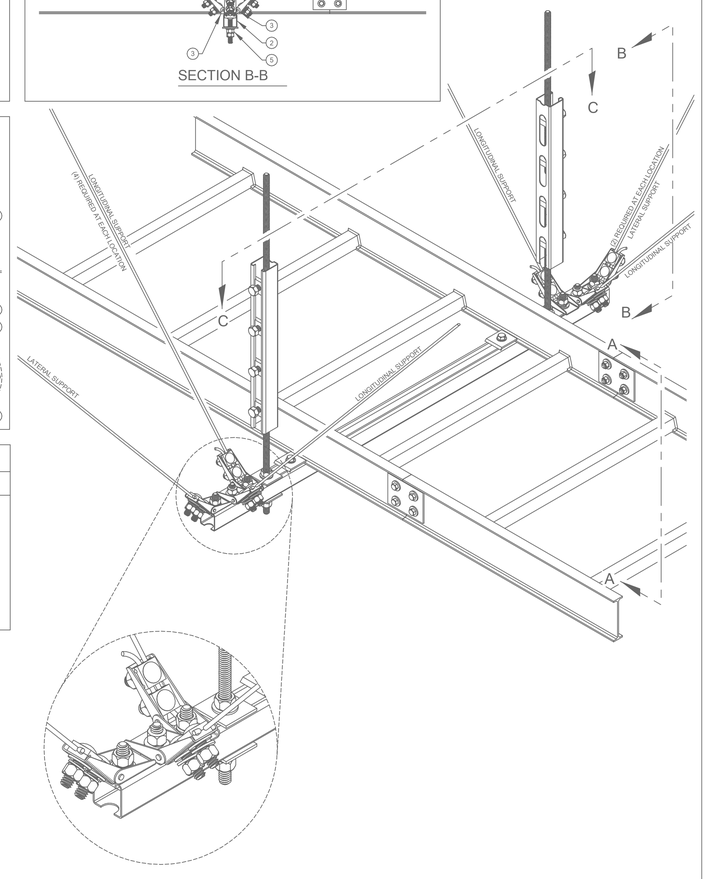


DIAGRAM H006 SEISMIC BRACING FOR CABLE TRAY/CABLES

(EXPOSED STRUCTURE OR ABOVE CEILING ONLY)

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REV	DATE	DESCRIPTION

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BID PACKAGE 5 - GENERAL CONSTRUCTION

ELECTRICAL DIAGRAMS

E433

11/6/2023 7:00:02 PM

KEYNOTES

1. CT WIRE.
2. (1) 120VAC REFERENCE AND POWER CIRCUIT, (1) 5-PHASE, 4-WIRE PLUS GROUND CIRCUIT AT THE METERED VOLTAGE. FED FROM DEDICATED 15A 3-POLE BREAKER.
3. LINE: 15AMP, 120VAC, 2 WIRE PLUS GROUND, 60HZ DIRECT FROM PANEL.
4. (1) MODBUS RTU CABLE: BELDEN 9841 LABELED PER DRAWING.
5. (1) ETHERNET CABLE: BELDEN 2412 TERMINATED PER EIA/TIA 568B PER DRAWING.

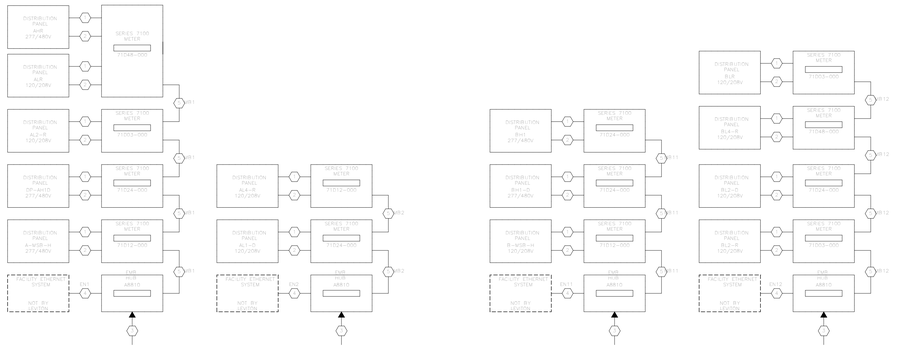
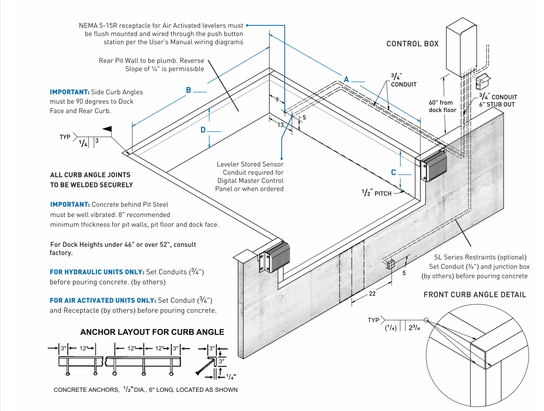


DIAGRAM U601 ENERGY METERING TOPOLOGY

NTS



8. **Electrical:** Motor is 1 HP, NEMA Standard T.E.N.V./56C frame. Standard motor voltages available are 120/208/240 volt single phase or 208/240V/480V and 575V three-phase. RPM: 3450. Electrical system has built in motor overload protection as standard. Power unit is mounted to unit subframe (elevated off pit floor) and pre-wired to an integral junction box.

DIAGRAM Z601 HYDRAULIC DOCK LEVELER

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BID PACKAGE 5 - GENERAL CONSTRUCTION

ELECTRICAL DIAGRAMS

E434

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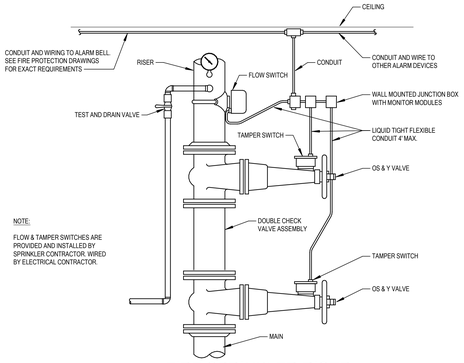

DIAGRAM D001 FIRE SPRINKLER RISER CONNECTION

NTS

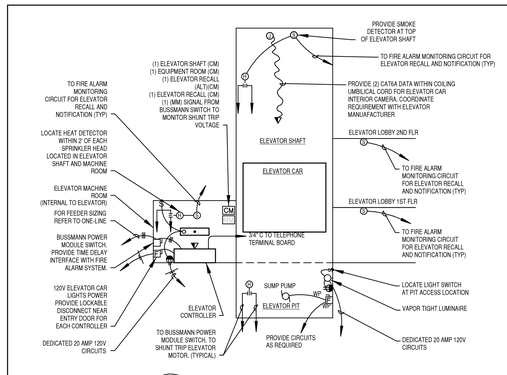

DIAGRAM D009 ELEVATOR CONNECTION>50' TRAVEL

NTS

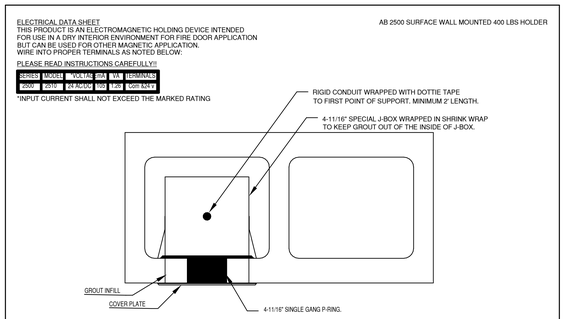

DIAGRAM D013 MASONRY ELECTRICAL BOX INSTALLATION

NTS

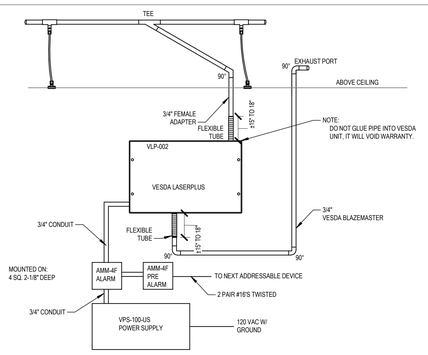

DIAGRAM D015A TYPICAL VESDA PIPING AND CONNECTION

NTS

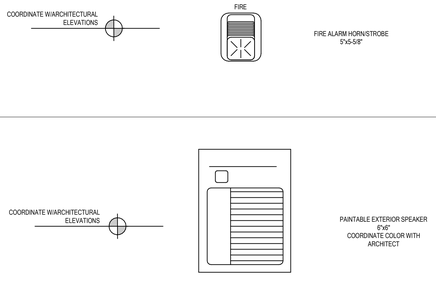

DIAGRAM D007 EXTERIOR FIRE ALARM HORN/STROBE & SPEAKER

NTS

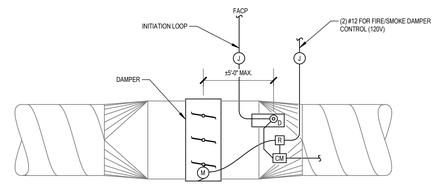

DIAGRAM D012 FIRE/SMOKE/DAMPERS CONNECTION

NTS

NOTE:

1. PROVIDE ADDRESSABLE INITIATION LOOP(S) AND POWER CIRCUIT FOR THE CARBON MONOXIDE DETECTORS.
2. PROVIDE CARBON MONOXIDE DETECTOR WITH ASSOCIATED MONITOR MODULE. SEE PLANS FOR QUANTITY AND LOCATION.
3. PROVIDE CONTROL MODULE WITH FAN SHUTDOWN RELAY TO SHUTDOWN MECHANICAL UNIT ON LOCAL CARBON MONOXIDE DETECTOR ACTIVATION.
4. PROVIDE FIRE ALARM BLUE STROBE(S). SEE PLANS FOR QUANTITY AND LOCATIONS.
5. PROVIDE DUCT SMOKE DETECTORS AND FAN RELAYS AT ALL FAN UNITS 2000 CFM AND OVER. SHUT DOWN ALL SUPPLY AND RETURN FANS UPON A GENERAL ALARM SIGNAL.
6. PROVIDE KEY OVERRIDE SWITCH FOR EVERY PAIR OF ELECTROMAGNETIC DOOR HOLDERS/RELEASES.
7. PROVIDE KEY OVERRIDE SWITCH IN MAIN ADMINISTRATION OFFICE THAT WILL RELEASE ALL ELECTROMAGNETIC DOOR HOLDER/RELEASES THROUGHOUT THE BUILDING.
8. COORDINATE WITH THE ACCESS CONTROL PROVIDER TO PROVIDE INPUT POINT THAT WILL ALLOW THE ACCESS CONTROL SYSTEM TO RELEASE ALL ELECTROMAGNETIC DOOR HOLDER/RELEASES THROUGHOUT THE BUILDING DURING A LOCK DOWN EVENT OR PER THE OWNERS REQUIREMENTS.
9. COORDINATE WITH THE INTERCOM PROVIDER TO PROVIDE INPUT POINT THAT WILL ALLOW THE INTERCOM SYSTEM TO RELEASE ALL ELECTROMAGNETIC DOOR HOLDER/RELEASES THROUGHOUT THE BUILDING DURING A LOCK DOWN EVENT OR PER THE OWNERS REQUIREMENTS.

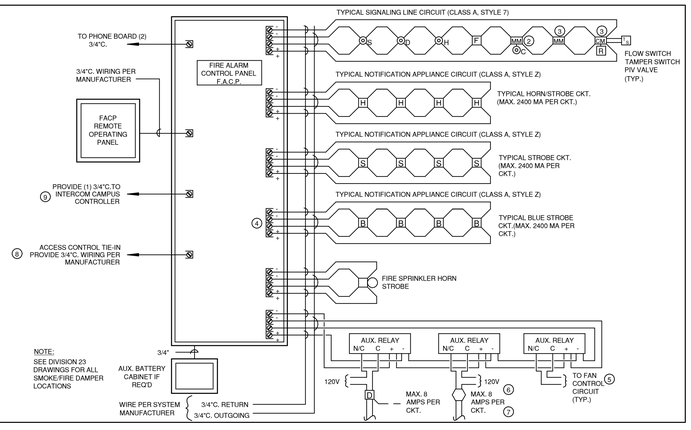

DIAGRAM D002 TYPICAL FIRE ALARM RISER

NTS

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VCBO NUMBER: 22785
CLIENT NUMBER: 23142
DATE: NOVEMBER 08 2023

PROFESSIONAL ENGINEER BRIAN HICKS 7709937 2202 STATE OF UTAH

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SALT LAKE ST. GEORGE

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SYSTEMS DIAGRAMS

E440

11/6/2023 7:00:53 PM

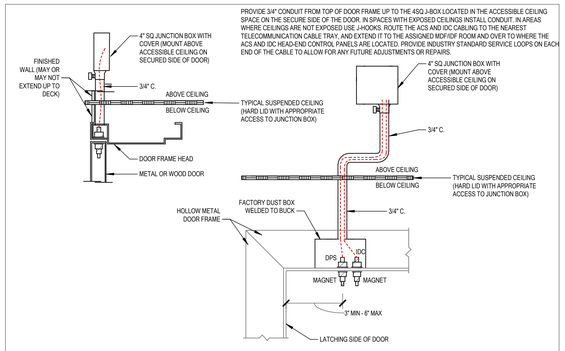

DIAGRAM EY305 DPS & IDC RECESSED MAGNETIC CONTACT MOUNTING ON DOOR

NTS

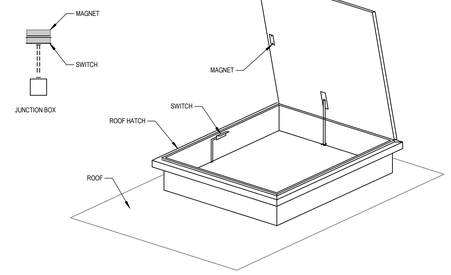

DIAGRAM EY302 ROOF HATCH WITH DOOR POSITION SWITCH & INTRUSION CONTRACT

NTS

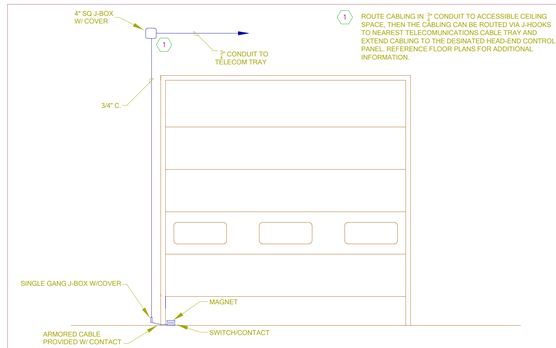

DIAGRAM EY039 OVERHEAD DOOR WITH DOOR POSITION SWITCH

NTS

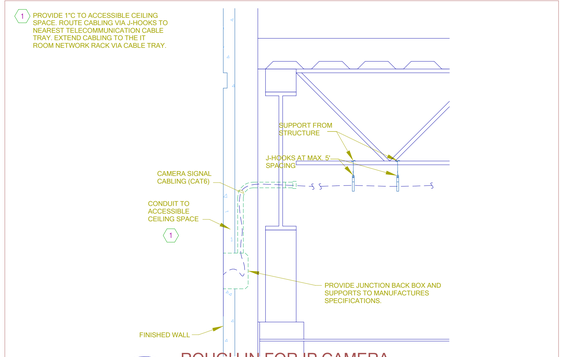

DIAGRAM EY605 ROUGH IN FOR IP CAMERA WALL MOUNT

NTS

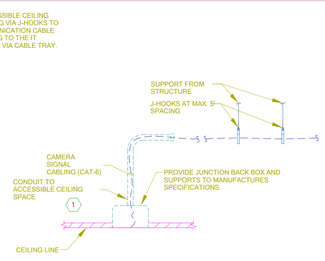

DIAGRAM EY502 ROUGH IN FOR IP CAMERA CEILING MOUNT

NTS

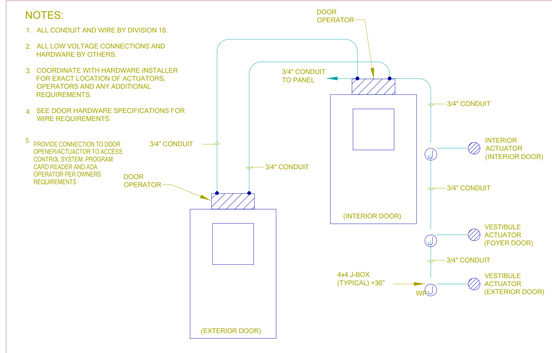

DIAGRAM E021 ADA ENTRY SYSTEMS

NTS

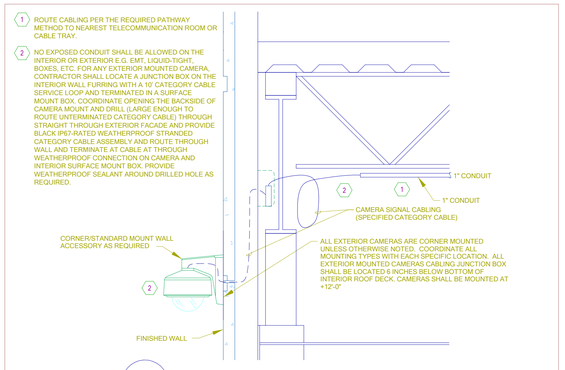

DIAGRAM E005 EXTERIOR IP CAMERA MOUNTING

NTS

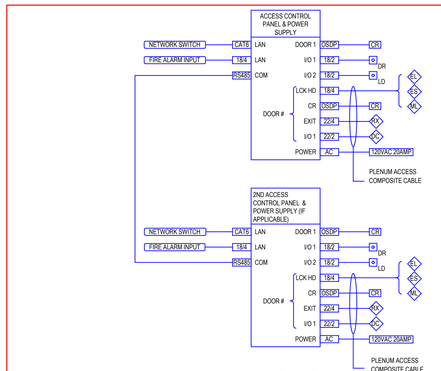

DIAGRAM EY101 TYPICAL ACCESS OSDP CONTROL - ONE LINE DIAGRAM

NTS

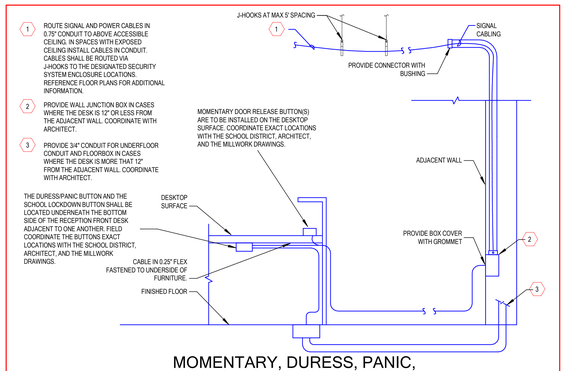

DIAGRAM EY404 MOMENTARY, DURESS, PANIC, LOCKDOWN BUTTONS DESK MOUNTING

NTS

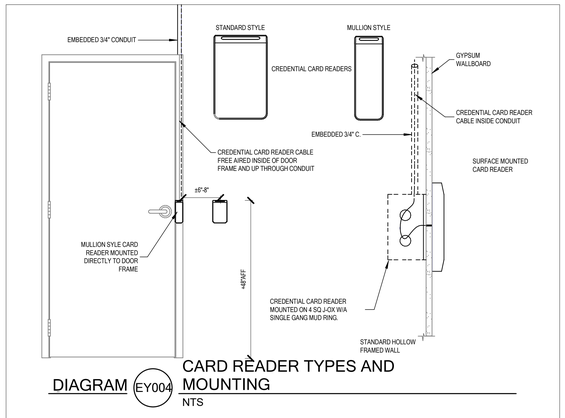

DIAGRAM EY004 CARD READER TYPES AND MOUNTING

NTS

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

SYSTEMS DIAGRAM

E441

11/6/2023 7:00:54 PM

R&O CONSTRUCTION (CMGC) WILL BE PROCURING THE CT/MS AND MDP DUE TO PROJECT SCHEDULE CONSTRAINTS. IN THE FUTURE MAIN BUILDING BID PACKAGE, DIVISION 26 SHALL INCLUDE THE COST OF REMAINING GEAR, EQUIPMENT, FEEDERS, AND INSTALLATION OF ENTIRE ONE-LINE AND ELECTRICAL INFRASTRUCTURE IN THEIR BID. BEYOND ONLY PROCUREMENT OF SAID EQUIPMENT, DIVISION 26 WILL BE RESPONSIBLE FOR TAKING DELIVERY AND PROVIDING A COMPLETE INSTALLATION OF ELECTRICAL SYSTEM AND ALL OTHER GOVERNING REQUIREMENTS TO PROVIDE A COMPLETE AND WORKING SYSTEM ELECTRICAL SYSTEM.

SHEET KEYNOTES

X1	REFER TO DISTRIBUTION BOARD SCHEDULES FOR ADDITIONAL BREAKERS AND SPD REQUIREMENTS.
X2	PROVIDE A PERMANENT PLAQUE ADJACENT TO THE MAIN SWITCHBOARD WITH AVAILABLE FAULT CURRENT CALCULATIONS.
X3	GFPE PROTECTION OF THE MAIN BREAKER SHALL BE TESTED PRIOR TO THE RELEASE OF THE METER AND RESULTS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE.
X4	PROVIDE AN ENERGY REDUCTION MAINTENANCE SWITCH WITH LOCAL, LIT STATUS INDICATOR TO ALLOW FOR A REDUCTION OF THE INSTANTANEOUS PICKUP AND INSTANTANEOUS DELAY SETTINGS FOR USE DURING MAINTENANCE. MOUNT DEVICE IN FACE OF DEAD-FRONT. PROVIDE SWITCH OF SAME MANUFACTURER AS THE CIRCUIT BREAKER.
X6	GROUNDING SHALL BE SUPPLIED FROM THE ELEVATOR MAIN LINE DISCONNECT AND CONTROLLER TO THE UPSTREAM PANEL AND BUILDING GROUND. GROUND WIRE SHALL BE THE SAME SIZE AS PHASE WIRES TO MINIMIZE ELECTRICAL NOISE INTERFERENCE.

ONELINE GENERAL NOTES

1. EMERGENCY EQUIPMENT INDICATED SHALL BE SELECTIVELY COORDINATED TO 0.1 SECONDS PER SPECIFICATION SECTION 26 0573. STUDY SHALL BE SUBMITTED PRIOR TO ALL OTHER EQUIPMENT SUBMITTALS.
2. SEE PLANS FOR LOCATIONS OF PANELBOARDS, SWITCHBOARDS TRANSFER SWITCHES, BUSWAY, TRANSFORMERS DISCONNECTS, ETC. AND PROVIDE NEMA RATED ENCLOSURES AS REQUIRED.
3. SUBMIT DIMENSIONED DRAWINGS OF ALL ELECTRICAL ROOMS SHOWING ALL EQUIPMENT LOCATIONS WITHIN EACH SPACE BASED ON THE EQUIPMENT MANUFACTURER GEAR SIZES WITH ALL EQUIPMENT SHOP DRAWINGS.
4. PROVIDE AN ARC ENERGY-REDUCING MAINTENANCE SWITCH FOR ALL OVER-CURRENT PROTECTIVE DEVICES RATED 1200 AMPS OR HIGHER. REFER TO SPECIFICATION SECTION 26 2815 OVER-CURRENT PROTECTIVE DEVICES AND 240.87 OF CURRENT NATIONAL ELECTRICAL CODE (NEC).
5. PROVIDE ELECTRONIC TRIP CIRCUIT BREAKERS FOR ALL CIRCUIT BREAKERS 400 AMPS AND ABOVE. REFER TO THE OVERCURRENT PROTECTION SPECIFICATION SECTION FOR ADDITIONAL REQUIREMENTS.
6. ALL EQUIPMENT SHALL BE FULLY RATED. NO SERIES RATINGS ARE ALLOWED. REFER TO SPECIFICATION SECTIONS FOR ADDITIONAL DETAILS.
7. PROVIDE PRELIMINARY SHORT CIRCUIT STUDY SUBMITTAL PRIOR TO SUBMITTAL OF ANY ELECTRICAL EQUIPMENT. REFER TO SPECIFICATION SECTION 26 0573 PROTECTIVE DEVICE STUDY. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
8. PROVIDE A SURGE PROTECTIVE DEVICE ON EACH SWITCHBOARD AND PANELBOARD LOCATED ON THE EMERGENCY DISTRIBUTION SYSTEM. REFER TO SPECIFICATION SECTION 26 4313 SURGE-PROTECTIVE DEVICES (SPD) FOR LOCATION CATEGORY.
9. REFER TO DISTRIBUTION BOARD AND PANELBOARD SCHEDULES FOR ADDITIONAL BREAKERS AND SPD REQUIREMENTS.
10. GFPE PROTECTION OF THE MAIN BREAKER SHALL BE TESTED PRIOR TO THE RELEASE OF THE METER AND RESULTS SHALL BE SUBMITTED TO THE SCHOOL DISTRICT BUILDING OFFICIAL
11. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.); 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
12. PROVIDE ALL REQUIRED LUG ADAPTERS, PIN REDUCERS, POLARIS LUG KITS, ETC. AS REQUIRED. PROVIDE NEC SIZED JUNCTION BOX AHEAD OF PANELBOARD/GEAR AS NEEDED TO LOCATED AND TERMINATE CONDUCTORS ON POLARIS LUG ADAPTERS (<10' FROM FINAL TERMINATION AT PANELBOARD). SIZE DOWN TO CONDUCTORS THAT FIT THE AVAILABLE LUGS AND/OR BREAKERS.

ALUMINUM CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY

TRANS KVA	O.C. PROT.	TYPE COND.*	GEC (1)	MIN. Z%
30	50	36	8 CU	3
45	70	34	4 CU	3
75	125	32X	2 CU	3
112.5	175	34X	2 CU	4
150	300	350	2/0 CU	4
225	400	375	2/0 CU	4
300	600	350-2	3/0 CU	5
500	800	340-3	3/0 CU	5
750	1200	350-4	3/0 CU	5

ALUMINUM XHHW-2 CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY △ 480-208/120 Y

O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR (3) QUAN.	CONDUCTOR (3) SIZE	CONDUIT SIZE	BONDING JUMPER (2)
100	T41X-1	120	1	4	1/0	2"	8 CU
175	T44X-1	180	1	4	4/0	2-1/2"	4 CU
225	T43S-1	250	1	4	350	3"	1/0 AL
400	T42S-2	410	2	4	250	3"	1/0 AL
600	T44O-2	620	2	4	500	4"	4/0 AL
800	T44O-3	810	3	4	400	4"	4/0 AL
1200	T44O-4	1240	4	4	500	4"	250 AL
1600	T44O-6	1620	6	4	400	4"	300 AL
3000	T44O-10	3100	10	4	500	4"	750 AL

ALUMINUM CONDUCTOR & O.C. PROT. FOR TRANSFORMER PRIMARY

TRANS KVA	O.C. PROT.	TYPE COND.*	GEC (1)	MIN. Z%
30	50	36	6 CU	3
45	70	34	2 CU	3
75	125	32X	2 CU	3
112.5	175	34X	1/0 CU	4
150	300	350	2/0 CU	4
225	400	375	2/0 CU	4
300	600	350-2	3/0 CU	5
500	800	340-3	3/0 CU	5
750	1200	350-4	3/0 CU	5

ALUMINUM XHHW-2 CONDUCTOR & O.C. PROT. FOR TRANSFORMER SECONDARY (200% NEUTRAL) △ 480-208/120 Y

O.C. PROT.	TYPE COND.*	COND. AMPS	SETS	CONDUCTOR (3) QUAN.	CONDUCTOR (3) SIZE	CONDUIT SIZE	BONDING JUMPER (2)
100	T52X-1	108	1	5	2/0	2-1/2"	6 CU
175	T53O-1	184	1	5	300	3"	1/0 AL
225	T55O-1	248	1	5	500	4"	1/0 AL
400	T535-2	400	2	5	350	3"	3/0 AL
600	T535-3	600	3	5	350	4"	4/0 AL
800	T535-4	800	4	5	350	4"	4/0 AL
1200	T550-5	1240	5	5	500	4"	350 AL
1600	T550-7	1736	7	5	500	4"	500 AL
3000	T575-10	3080	10	5	750	4"	750 AL

* SEE SCHEDULE FOR CONDUIT AND WIRE SIZE

NOTES:
1. GROUNDING ELECTRODE CONDUCTOR. (NEC 250.66)
2. SUPPLY SIDE BONDING JUMPER. (NEC 250.102 (C)(1))
3. XHHW INSULATION.

ALUMINUM CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUCTOR SIZE	INSULATION	EQ. GND COND.(AL)
31X	120	2"	3	1/0	XHHW-2	4
41X	120	2"	4	1/0	XHHW-2	4
51X	96	2"	5*	1/0	XHHW-2	4
32X	135	2"	3	2/0	XHHW-2	4
42X	135	2"	4	2/0	XHHW-2	4
52X	108	2"	5*	2/0	XHHW-2	4
33X	155	2"	3	3/0	XHHW-2	4
43X	155	2"	4	3/0	XHHW-2	4
53X	124	3"	5*	3/0	XHHW-2	4
34X	180	2"	3	4/0	XHHW-2	4
44X	180	3"	4	4/0	XHHW-2	4
54X	144	3"	5*	4/0	XHHW-2	2
325	205	2"	3	250	XHHW-2	2
425	205	3"	4	250	XHHW-2	2
525	164	3"	5*	250	XHHW-2	2
330	230	3"	3	300	XHHW-2	2
430	230	3"	4	300	XHHW-2	2
530	184	3"	5*	300	XHHW-2	2
335	250	3"	3	350	XHHW-2	2
435	250	3"	4	350	XHHW-2	2
535	200	3"	5*	350	XHHW-2	2
340	270	3"	3	400	XHHW-2	2
440	270	3"	4	400	XHHW-2	2
540	216	3"	5*	400	XHHW-2	2
350	310	4"	3	500	XHHW-2	1
450	310	4"	4	500	XHHW-2	1
550	248	4"	5*	500	XHHW-2	1
375	385	4"	3	750	XHHW-2	1
475	385	4"	4	750	XHHW-2	1
575	308	4"	5*	750	XHHW-2	1

ALUMINUM CONDUCTOR & CONDUIT SCHEDULE FOR PARALLEL RUNS

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUCTOR SIZE	CONDUIT SIZE	EQ. GND. COND.(AL)
325-2	400	410	2	3	250	2-1/2"	2/0
425-2	400	410	2	4	250	2-1/2"	2/0
535-2	400	400	2	5*	350	3"	2/0
350-2	600	620	2	3	500	3"	2/0
450-2	600	620	2	4	500	3"	2/0
535-3	600	600	3	5*	350	3"	2/0
340-3	800	810	3	3	400	2-1/2"	3/0
440-3	800	810	3	4	400	3"	3/0
535-4	800	800	4	5*	350	4"	3/0
375-3	1000	1155	3	3	750	4"	4/0
475-3	1000	1155	3	4	750	4"	4/0
535-5	1000	1000	5	5*	350	4"	4/0
350-4	1200	1240	4	3	500	4"	250
450-4	1200	1240	4	4	500	4"	250
550-5	1200	1240	5	5*	500	4"	250
340-6	1600	1620	6	3	400	4"	350
440-6	1600	1620	6	4	400	4"	350
550-7	1600	1736	7	5*	500	4"	350
475-6	2000	2310	6	4	750	4"	400
475-7	2500	2695	7	4	750	5"	600
475-8	3000	3080	8	4	750	5"	600
475-11	4000	4235	11	4	750	5"	750

NOTES:
IN PARALLEL RUNS SIZE GND. COND. IN ACCORDANCE WITH NEC PARA. 250-122.

GND. CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS

* 200% NEUTRAL, DERATED TO 80% BASED ON NEC 310.15.B(5)(C)

** COPPER CONDUCTOR (XHHW)

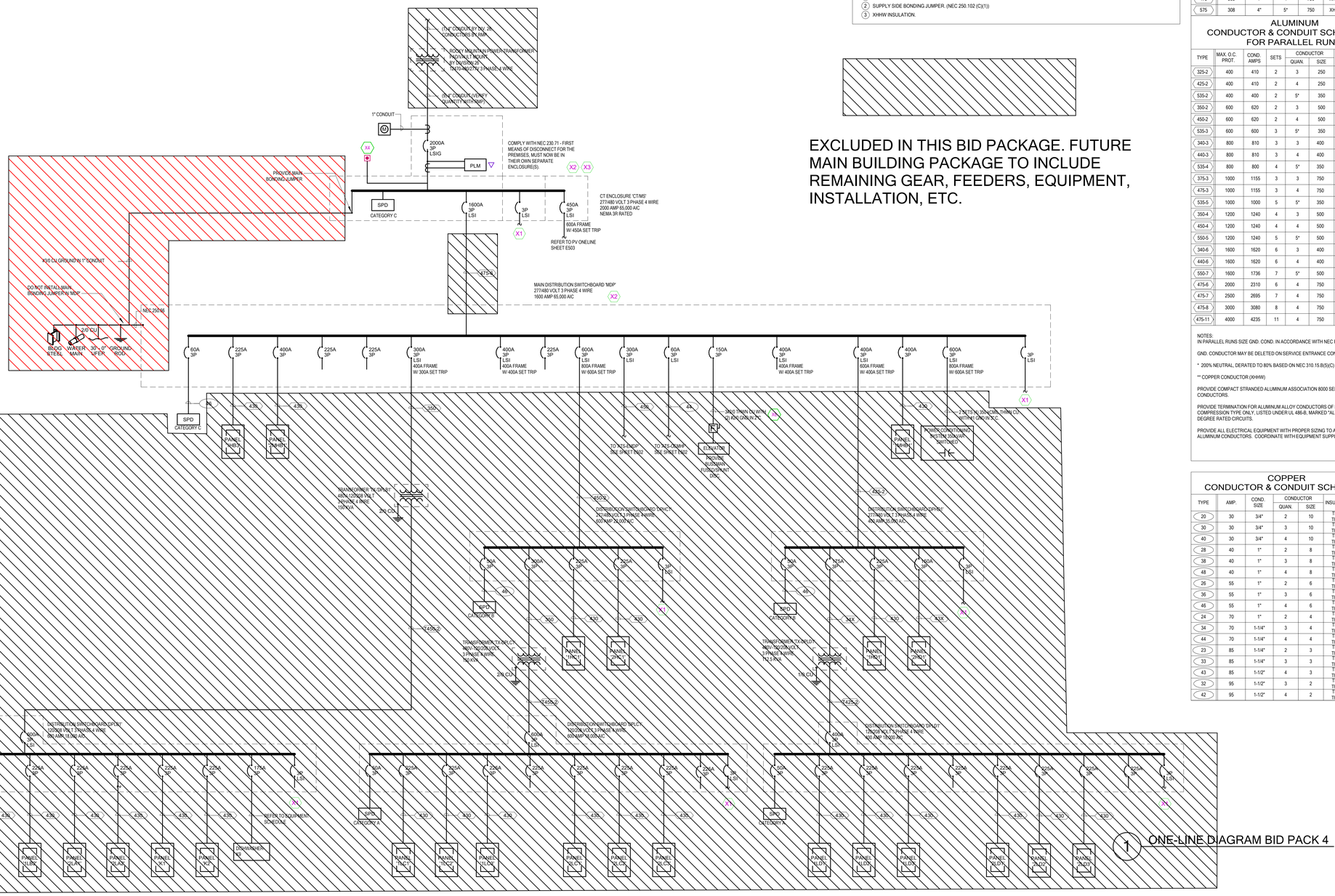
PROVIDE COMPACT STRANDED ALUMINUM ASSOCIATION 8000 SERIES ALLOY CONDUCTORS

PROVIDE TERMINATION FOR ALUMINUM ALLOY CONDUCTORS OF HYDRAULIC COMPRESSION TYPE ONLY, LISTED UNDER UL 486-B, MARKED "AL7CU" FOR 75 DEGREE RATED CIRCUITS.

PROVIDE ALL ELECTRICAL EQUIPMENT WITH PROPER SIZING TO ACCOMMODATE ALUMINUM CONDUCTORS. COORDINATE WITH EQUIPMENT SUPPLIER.

COPPER CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUCTOR SIZE	INSULATION	EQ. GND. COND.(CU)
20	30	3/4"	2	10	THHN THWN	10
30	30	3/4"	3	10	THHN THWN	10
40	30	3/4"	4	10	THHN THWN	10
28	40	1"	2	8	THHN THWN	10
38	40	1"	3	8	THHN THWN	10
48	40	1"	4	8	THHN THWN	10
26	55	1"	2	6	THHN THWN	8
36	55	1"	3	6	THHN THWN	8
46	55	1"	4	6	THHN THWN	8
24	70	1"	2	4	THHN THWN	8
34	70	1-1/4"	3	4	THHN THWN	8
44	70	1-1/4"	4	4	THHN THWN	8
23	85	1-1/4"	2	3	THHN THWN	8
33	85	1-1/4"	3	3	THHN THWN	8
43	85	1-1/2"	4	3	THHN THWN	8
32	95	1-1/2"	3	2	THHN THWN	6
42	95	1-1/2"	4	2	THHN THWN	6


(7)4" CONDUIT BY DIV. 26 CONDUCTORS IN RUN
ROCKY MOUNTAIN POWER-TRANSFORMER PAD MOUNT BY DIVISION 26 TX(70-NO)277V 3 PHASE 4 WIRE
(5) 4" CONDUIT (VERIFY QUANTITY WITH RMP)
1" CONDUIT
2000A 3P LSIG
PLM
X4
X2
X3
COMPLY WITH NEC 230.71 - FIRST MEANS OF DISCONNECT FOR THE PREMISES, MUST NOW BE IN THEIR OWN SEPARATE ENCLOSURE(S).
PROVIDE MAIN BONDING JUMPER
SPD CATEGORY C
1600A 3P LSI
3P LSI
450A 3P LSI
600A FRAME W/ 450A SET TRIP
CT ENCLOSURE 'CT/MS' 277/480 VOLT 3 PHASE 4 WIRE 2000 AMP 65,000 AIC NEMA 3R RATED
REFER TO PV ONELINE SHEET E503
X1
4750A
MAIN DISTRIBUTION SWITCHBOARD 'MDP' 277/480 VOLT 3 PHASE 4 WIRE 1600 AMP 65,000 AIC
X10 CU GROUND IN 1" CONDUIT
DO NOT INSTALL MAIN BONDING JUMPER IN 'MDP'
NEC 250.66
2/0 CU
BLDG STEEL
WATER MAIN
30'+- 0" GROUNDING ROD
60A 3P
225A 3P
400A 3P
300A 3P LSI 400A FRAME W/ 300A SET TRIP
400A 3P LSI 400A FRAME W/ 400A SET TRIP
600A 3P LSI 600A FRAME W/ 600A SET TRIP
150A 3P
600A 3P LSI 800A FRAME W/ 600A SET TRIP
3P LSI
SPD CATEGORY C
PANEL 1HB-1
PANEL 1MHB-1
TRANSFORMER 'TX-1SP1-ST' 480V-120/208 VOLT 3PHASE 4 WIRE 150 KVA
2/0 CU
TO 'ATS-EMSP' SEE SHEET E602
TO 'ATS-CSMSP' SEE SHEET E602
ELEVATOR PROVIDE DISCONNECT PER ELEVATOR MANUFACTURER
3#2/0 THWN CU WITH #2 KON CU IN 2"C
DISTRIBUTION SWITCHBOARD 'DSHC1' 277/480 VOLT 3 PHASE 4 WIRE 600 AMP 24,000 AIC
PANEL 1HC-1
PANEL 2HC-1
TRANSFORMER 'TX-2SP1-ST' 480V-120/208 VOLT 3 PHASE 4 WIRE 112.5 KVA
PANEL 1MHB-1
KAISER CONDITIONING SYSTEM 300 KVA 3WIRE/4WIRE
2 SETS #1 350 KCMIL THWN CU WITH #1 KON CU IN 2"C
DISTRIBUTION SWITCHBOARD 'DPHSB' 277/480 VOLT 3 PHASE 4 WIRE 600 AMP 35,000 AIC
PANEL 1HDL-1
PANEL 2HDL-1
DISTRIBUTION SWITCHBOARD 'SPLIT' 120/208 VOLT 3 PHASE 4 WIRE 600 AMP 18,000 AIC
DISTRIBUTION SWITCHBOARD 'SPLIT2' 120/208 VOLT 3 PHASE 4 WIRE 600 AMP 18,000 AIC
SPD CATEGORY A
PANEL 1MC-1
PANEL 1HCC-1
PANEL 1HDL-1
PANEL 1CL-1
PANEL 2CL-1
PANEL 2HDL-1
PANEL 1HDL-2
PANEL 2HDL-2
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INDEX OF SWITCHBOARD SCHEDULE

CT/MS	MDP	DPLC1
DPLD1	DPHC1	DPLB1
DPHD1	EMDP	DPPV

PANELBOARD GENERAL NOTES

1. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.). 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
2. PROVIDE TYPED PANELBOARD INDEXES AS EACH PANELBOARD. FILL OUT PANELBOARD'S CIRCUIT DIRECTORY CARD UPON COMPLETION OF INSTALLATION WORK. UTILIZE ACTUAL FINAL BUILDING ROOM NUMBERS, NOT ARCHITECTURAL NUMBERS USED ON DRAWINGS. IDENTIFY INDIVIDUAL LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM SERVER, LIGHTING CIRCUITS, INDIVIDUAL RECEPTACLE CIRCUITS BY ROOM NUMBERS AND EQUIPMENT NAMES. INCLUDE ROOM NUMBER WITH EQUIPMENT CIRCUIT DESIGNATIONS. ALL DIRECTORIES TO BE TYPEWRITTEN.
3. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
4. ALL MECHANICAL AND KITCHEN EQUIPMENT BREAKERS TO BE SIZED PER THE MECHANICAL EQUIPMENT SCHEDULE AND KITCHEN EQUIPMENT SCHEDULE.

ONELINE GENERAL NOTES

1. EMERGENCY EQUIPMENT INDICATED SHALL BE SELECTIVELY COORDINATED TO 0.1 SECONDS PER SPECIFICATION SECTION 26 0573. STUDY SHALL BE SUBMITTED PRIOR TO ALL OTHER EQUIPMENT SUBMITTALS.
2. SEE PLANS FOR LOCATIONS OF PANELBOARDS, SWITCHBOARDS TRANSFER SWITCHES, BUSWAY, TRANSFORMERS DISCONNECTS, ETC. AND PROVIDE NEMA RATED ENCLOSURES AS REQUIRED.
3. SUBMIT DIMENSIONED DRAWINGS OF ALL ELECTRICAL ROOMS SHOWING ALL EQUIPMENT LOCATIONS WITHIN EACH SPACE BASED ON THE EQUIPMENT MANUFACTURER GEAR SIZES WITH ALL EQUIPMENT SHOP DRAWINGS.
4. PROVIDE AN ARC ENERGY-REDUCING MAINTENANCE SWITCH FOR ALL OVER-CURRENT PROTECTIVE DEVICES RATED 1200 AMPS OR HIGHER. REFER TO SPECIFICATION SECTION 26 2815 OVER-CURRENT PROTECTIVE DEVICES AND 240.87 OF CURRENT NATIONAL ELECTRICAL CODE (NEC).
5. PROVIDE ELECTRONIC TRIP CIRCUIT BREAKERS FOR ALL CIRCUIT BREAKERS 400 AMPS AND ABOVE. REFER TO THE OVERCURRENT PROTECTION SPECIFICATION SECTION FOR ADDITIONAL REQUIREMENTS.
6. ALL EQUIPMENT SHALL BE FULLY RATED. NO SERIES RATINGS ARE ALLOWED. REFER TO SPECIFICATION SECTIONS FOR ADDITIONAL DETAILS.
7. PROVIDE PRELIMINARY SHORT CIRCUIT STUDY SUBMITTAL PRIOR TO SUBMITTAL OF ANY ELECTRICAL EQUIPMENT. REFER TO SPECIFICATION SECTION 26 0573 PROTECTIVE DEVICE STUDY. PROVIDE AIC AND ARC-FLASH HAZARD LABELS PER THE SPECIFICATIONS AND NEC.
8. PROVIDE A SURGE PROTECTIVE DEVICE ON EACH SWITCHBOARD AND PANELBOARD LOCATED ON THE EMERGENCY DISTRIBUTION SYSTEM. REFER TO SPECIFICATION SECTION 26 4313 SURGE-PROTECTIVE DEVICES (SPD) FOR LOCATION CATEGORY.
9. REFER TO DISTRIBUTION BOARD AND PANELBOARD SCHEDULES FOR ADDITIONAL BREAKERS AND SPD REQUIREMENTS.
10. GFPE PROTECTION OF THE MAIN BREAKER SHALL BE TESTED PRIOR TO THE RELEASE OF THE METER AND RESULTS SHALL BE SUBMITTED TO THE SCHOOL DISTRICT BUILDING OFFICIAL.
11. PROVIDE EQUIPMENT LABELING PER SPECIFICATIONS 26 0553. THE LABEL SHALL IDENTIFY THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLE ORIGINATES, AND THE SYSTEM VOLTAGE, PHASE OR LINE AND SYSTEM AT TALL TERMINATION, CONNECTION, AND SPLICE POINTS. FOR EXAMPLE: FEEDER POWER SUPPLY FOR PANEL "XX" ORIGINATES AT PANEL "XX" (OR SWITCHBOARD "XX", TRANSFORMER "XX", SWITCH "XX", ETC.). 120/208 VOLTS, 3-PHASE, PHASE COLOR IDENTIFICATION (OR 120/240, 277/480, ETC.).
12. PROVIDE ALL REQUIRED LUG ADAPTERS, PIN REDUCERS, POLARIS LUG KITS, ETC. AS REQUIRED. PROVIDE NEC SIZED JUNCTION BOX AHEAD OF PANELBOARD/GEAR AS NEEDED TO LOCATED AND TERMINATE CONDUCTORS ON POLARIS LUG ADAPTERS (<10' FROM FINALTERMINATION AT PANELBOARD). SIZE DOWN TO CONDUCTORS THAT FIT THE AVAILABLE LUGS AND/OR BREAKERS.

SWITCHBOARD SCHEDULE

SWITCHBOARD: CT/MS

LOCATION: YARD 1206A
FED FROM:
MOUNTING:
ENCLOSURE: NEMA 3R
BUSSING:
VOLTS: 480/277 Y
PHASE: 3
WIRES: 4
LUGS: Standard
MAINS/BUS AMPS: 2,000
MAIN DISC. TYPE: MCB
MAIN DISC. TRIP: 2000
MAIN DISC. FRM.: 2000
DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	MDP	3	1600 A	0 VA	LSI
2	RMP PV DISCONNECT	3	450 A	0 VA	LSI
3	SPD	3	60 A	0 VA	
4	SPARE	3	400 A	0 VA	LSI
5	SPACE ONLY	1	--	--	
6	SPACE ONLY	1	--	--	
7	SPACE ONLY	1	--	--	
8	SPACE ONLY	1	--	--	
9	SPACE ONLY	1	--	--	
10	SPACE ONLY	1	--	--	
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 65,000

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: MDP

LOCATION: ELEC 1207
FED FROM: CT/MS
MOUNTING:
ENCLOSURE
BUSSING:
VOLTS: 480/277 Y
PHASE: 3
WIRES: 4
LUGS: Standard
MAINS/BUS AMPS: 1,600
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO
MAIN DISC. FRM.:
DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1HB3	3	225 A	0 VA	
2	2MHB1	3	400 A	0 VA	
3	TX-DPLB1	3	300 A	0 VA	LSI 400A FRAME
4	DPHC1	3	600 A	0 VA	LSI 800A FRAME
5	DPHD1	3	400 A	0 VA	LSI 600A FRAME
6	1MHB1	3	400 A	0 VA	
7	ELEVATOR	3	150 A	0 VA	
8	ATS-EMDP	3	300 A	0 VA	LSI
9	ATS-OEMHF	3	60 A	0 VA	LSI
10	225A SPARE	3	225 A	0 VA	
11	225A SPARE	3	225 A	0 VA	
12	400A SPARE	3	400 A	0 VA	LSI
13	225A SPARE	3	225 A	0 VA	
14	400A SPARE	3	400 A	0 VA	LSI
15	POWER CONDITIONING	3	600 A	0 VA	LSI 800A FRAME
16	SPD	3	--	--	
17	SPACE ONLY	1	--	--	
18	SPACE ONLY	1	--	--	
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 61,900

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPLC1

LOCATION: ELEC 1333
FED FROM: TX-DPLC1
MOUNTING: SURFACE
ENCLOSURE
BUSSING:
VOLTS: 120/208 Y
PHASE: 3
WIRES: 4
LUGS: Standard
MAINS/BUS AMPS: 600
MAIN DISC. TYPE: MCB
MAIN DISC. TRIP: 600
MAIN DISC. FRM.: 600
DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1LC1	3	225 A	0 VA	
2	1LC2	3	225 A	0 VA	
3	1LC3	3	225 A	0 VA	
4	2LC1	3	225 A	0 VA	
5	2LC2	3	225 A	0 VA	
6	2LC3	3	225 A	0 VA	
7	SPARE	3	225 A	0 VA	
8	SPARE	3	225 A	0 VA	
9	SPARE	3	225 A	0 VA	
10	SPARE	3	225 A	0 VA	
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 15,316

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPLD1

LOCATION: ELEC 1909
FED FROM: TX-DPLD1
MOUNTING: SURFACE
ENCLOSURE:
BUSSING:
VOLTS: 120/208 Y
PHASE: 3
WIRES: 4
LUGS: Standard
MAINS/BUS AMPS: 400
MAIN DISC. TYPE: MCB
MAIN DISC. TRIP: 400
MAIN DISC. FRM.: 400
DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1LD1	3	225 A	0 VA	
2	1LD2	3	225 A	0 VA	
3	1LD3	3	225 A	0 VA	
4					
5	2LD1	3	225 A	0 VA	
6	2LD2	3	225 A	0 VA	
7	2LD3	3	225 A	0 VA	
8					
9	SPARE	1	20 A	0 VA	
10	SPARE	1	20 A	0 VA	
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 11,849

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPHC1

LOCATION: ELEC 1333
FED FROM: MDP
MOUNTING:
ENCLOSURE
BUSSING:
VOLTS: 480/277 Y
PHASE: 3
WIRES: 4
LUGS: Standard
MAINS/BUS AMPS: 600
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO
MAIN DISC. FRM.:
DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1HC1	3	225 A	0 VA	
2	TX-DPLS1	3	300 A	0 VA	
3	2HC1	3	225 A	0 VA	
4					
5					
6					
7					
8					
9					
10					
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 23,493

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPLB1

LOCATION: ELEC 1207
FED FROM: TX-DPLB1
MOUNTING:
ENCLOSURE
BUSSING:
VOLTS: 120/208 Y
PHASE: 3
WIRES: 4
LUGS: Standard
MAINS/BUS AMPS: 800
MAIN DISC. TYPE: MCB
MAIN DISC. TRIP: 600
MAIN DISC. FRM.: 800
DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	1LB1	3	225 A	0 VA	
2	K1	3	225 A	0 VA	
3	K2	3	225 A	0 VA	
4	1LA1	3	225 A	0 VA	
5	1LA2	3	225 A	0 VA	
6	1MLB1	3	225 A	0 VA	
7	1LB2	3	225 A	0 VA	
8	2LA1	3	225 A	0 VA	
9	2LA2	3	225 A	0 VA	
10					
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 18,497

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPHD1

LOCATION: ELEC 1009
FED FROM: MDP
MOUNTING:
ENCLOSURE
BUSSING:
VOLTS: 480/277 Y
PHASE: 3
WIRES: 4
LUGS: Standard
MAINS/BUS AMPS: 400
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO
MAIN DISC. FRM.:
DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS:
1	TX-DPLD1	3	125 A	0 VA	
2	1HD1	3	225 A	0 VA	
3	2HD1	3	225 A	0 VA	
4					
5					
6					
7					
8					
9					
10					
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 24,536

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: EMDP

LOCATION: ELEC 1207
FED FROM: ATS-EMDP
MOUNTING:
ENCLOSURE
BUSSING:
VOLTS: 480/277 Y
PHASE: 3
WIRES: 4
LUGS: Standard
MAINS/BUS AMPS: 0
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO
MAIN DISC. FRM.:
DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	TEMPE	3	225 A	0 VA	
2					
3					
4					
5					
6					
7					
8					
9					
10					
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 9,240

NOTES:

SWITCHBOARD SCHEDULE

SWITCHBOARD: DPPV

LOCATION: ELEC 2424
FED FROM: RMP PV DISCONNECT
MOUNTING:
ENCLOSURE
BUSSING:
VOLTS: 480/277 Y
PHASE: 3
WIRES: 4
LUGS: Standard
MAINS/BUS AMPS: 0
MAIN DISC. TYPE: MLO
MAIN DISC. TRIP: MLO
MAIN DISC. FRM.:
DOOR-IN-DOOR:
SPD: X

CKT	CIRCUIT DESCRIPTION	# OF POLES	AMPS	Load	REMARKS
1	INV1	3	225 A	0 VA	
2					
3					
4					
5					
6					
7					
8					
9					
10					
			TOTAL CONN. LOAD:	0 VA	
			TOTAL AMPS:	0 A	

AIC RATING: 585

NOTES:

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: SEPT. 15 2023

9/15/2023
BRIAN HICKS
7750809
STATE OF UTAH

BNA CONSULTING
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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 4

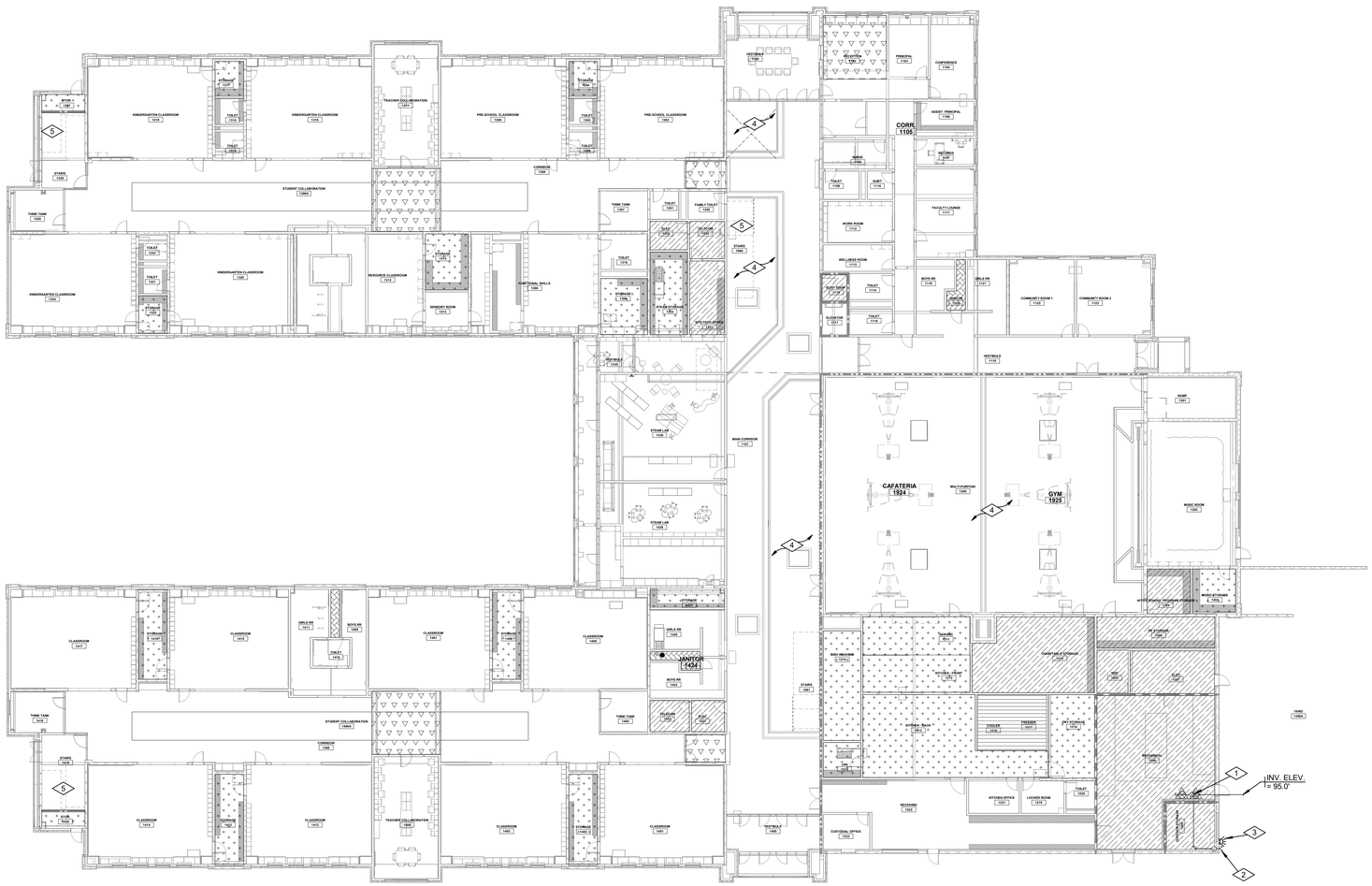
SWITCHBOARD SCHEDULES

E605-BP4

9/15/2023 12:52:01 PM

REFERENCE NOTES

1. POINT OF CONNECTION (P.O.C.) CONNECT TO SITE UTILITY PIPING IN THIS LOCATION. PROVIDE FLANGED CONNECTION INSIDE BUILDING AT 1'-0" A.F.F. MATCH PIPING SIZE AND MATERIAL OR PROVIDE COMPATIBLE TRANSITION. FIRE PROTECTION CONTRACTOR TO COORDINATE EXACT LOCATION.
2. SIAMESE TYPE FIRE DEPARTMENT CONNECTION. (F.D.C.) LOCATE ON EXTERIOR WALL PER NFPA 13 REQUIREMENTS.
3. WALL MOUNTED FIRE ALARM HORN STROBE. PROVIDED BY FIRE SPRINKLER CONTRACTOR AND WIRED BY ELECTRICAL OR FIRE ALARM CONTRACTOR. SEE ELECTRICAL
4. OPEN TO ABOVE.
5. SPRINKLER OPEN AREA BELOW STAIR. AREA HAS A GYP. BOARD CEILING.

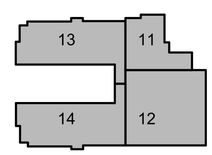


FIRE PROTECTION PLAN - LEVEL 01

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/16" = 1'-0"

KEY PLAN - MAIN LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	11-22-23	Addendum 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

FIRE PROTECTION PLAN - LEVEL 01

2

FP101

11/22/2023 10:54:26 AM

REFERENCE NOTES

1 SKYLIGHT, COORDINATE WITH ARCHITECTURAL PLANS.
NO FIRE PROTECTION MAINS TO PASS THRU AREA.

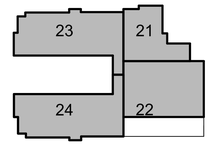
FIRE PROTECTION PLAN - LEVEL 02

NORTH

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/16" = 1'-0"

KEY PLAN - UPPER LEVEL



NORTH

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	11-22-23	Addendum 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

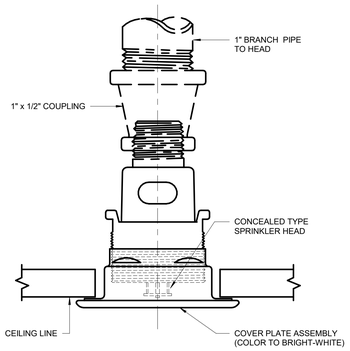
BID PACKAGE 5 - GENERAL CONSTRUCTION

FIRE PROTECTION PLAN - LEVEL 02

2

FP201

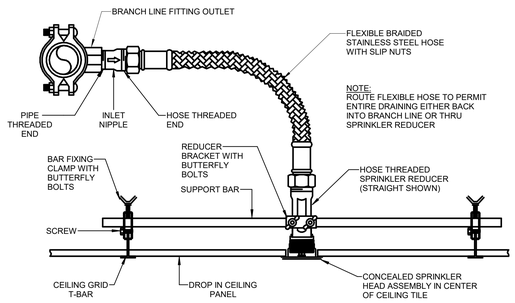
11/22/2023 10:54:28 AM



CONCEALED SPRINKLER HEAD DETAIL

SCALE: NTS

2 / FP601



FLEXIBLE HOSE DETAIL

SCALE: NTS

3 / FP601

FIRE PROTECTION LEGEND

- LIGHT HAZARD
- LAY-IN OR GYP. BOARD CEILING (VERIFY AND COORDINATE WITH ARCHITECTURAL DRAWINGS)
- CONCEALED TYPE SPRINKLER HEADS SIMILAR TO VIKING VK4621 INSTALLED TIGHT TO CEILING WITH BRIGHT WHITE COVER PLATE

- ORDINARY HAZARD, GROUP 1
- EXPOSED STRUCTURE (NO CEILING)
- SIDE WALL MOUNTED DRY TYPE SPRINKLER HEAD.
- PROVIDE PROTECTIVE CAGE

- LIGHT HAZARD
- EXPOSED STRUCTURE (NO CEILING)
- UPRIGHT BRASS HEADS ON EXPOSED PIPING

- ORDINARY HAZARD, GROUP 1
- LAY-IN OR GYP. BOARD CEILING (VERIFY AND COORDINATE WITH ARCHITECTURAL DRAWINGS)
- CONCEALED TYPE SPRINKLER HEADS SIMILAR TO VIKING VK4621 INSTALLED TIGHT TO CEILING WITH BRIGHT WHITE COVER PLATE

- LIGHT HAZARD
- SKY LIGHT (VERIFY AND COORDINATE WITH ARCHITECTURAL DRAWINGS)
- RECESSED SIDE WALL MOUNTED DRY TYPE SPRINKLER HEAD.

- ORDINARY HAZARD, GROUP 1
- FREEZER/COOLER BOXES
- NON-FREEZE, DRY TYPE, QUICK RESONSE, BRASS PENEDENT HEADS WITH HEAD GUARDS

- ORDINARY HAZARD, GROUP 1
- EXPOSED STRUCTURE (NO CEILING)
- UPRIGHT BRASS HEADS ON EXPOSED PIPING

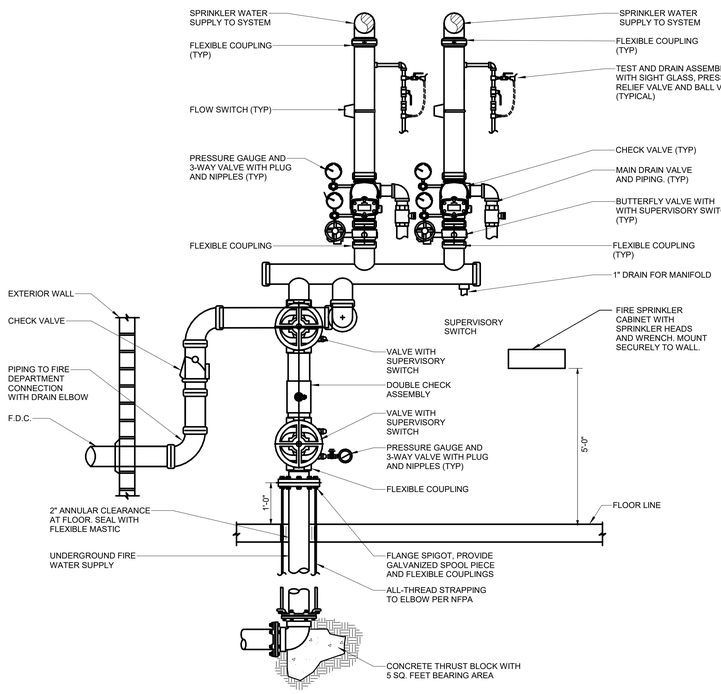
- LIGHT HAZARD
- LAY-IN OR GYP. BOARD CEILING (VERIFY AND COORDINATE WITH ARCHITECTURAL DRAWINGS)
- CONCEALED TYPE SPRINKLER HEADS SIMILAR TO VIKING VK4621 INSTALLED TIGHT TO CEILING WITH BLACK COVER PLATE

FIRE SPRINKLER RISER

SPRINKLER ALARM BELL

WALL MOUNTED SIAMESE FIRE DEPARTMENT CONNECTION W/ KNOXCAPS

NOTE: CONTRACTOR SHALL COORDINATE ALL PIPING HUNG FROM STRUCTURE WITH REQUIREMENTS OF STRUCTURAL ENGINEERS DRAWINGS. SEE STRUCTURAL DRAWINGS FOR EARTHQUAKE BRACING DESIGN VALUES.



FIRE SPRINKLER RISER DETAIL - TWO SYSTEMS

SCALE: NTS

1 / FP601

GENERAL FIRE PROTECTION NOTES

1. THE FIRE SPRINKLER CONTRACTOR SHALL COORDINATE HIS WORK WITH THE ELECTRICAL, SHEET METAL, PLUMBING, AND CEILING CONTRACTORS TO AVOID ANY CONFLICTS IN PIPE ROUTING OR HEAD LOCATIONS.
2. RUN SPRINKLING PIPING AS HIGH AS POSSIBLE IN SPACE ABOVE CEILING AND COORDINATE WITH DUCTWORK.
3. FIRE SPRINKLER PLANS SHALL BE APPROVED BY ALL GOVERNING AGENCIES PRIOR TO SUBMITTING PLANS TO THE ARCHITECT.
4. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE COMPLETE FIRE SPRINKLER SYSTEMS, INCLUDING ALL ITEMS AS REQUIRED OR RECOMMENDED BY ALL GOVERNING AGENCIES.
5. FIRE SPRINKLER SYSTEM SHALL COMPLY WITH N.F.P.A. 13, AND ALL GOVERNING AGENCIES.
6. PIPE SLEEVES THROUGH FIRERATED WALLS, PARTITIONS, AND CEILINGS SHALL BE OF FIRE RATED CONSTRUCTION. SPACE BETWEEN PIPE AND SLEEVE SHALL BE PACKED WITH FIREPROOF MATERIAL, U.L. LISTED.
7. FIRE SPRINKLER HEADS IN INDIVIDUAL ROOMS TO BE RUN IN STRAIGHT LINES AND COORDINATED WITH CEILING AND LIGHTS.
8. FIRE SPRINKLER CONTRACTOR SHALL COORDINATE HIS LOCATION OF PIPING VERY CAREFULLY WITH THE ARCHITECTURAL AND STRUCTURAL PLANS AND AS APPROVED BY THE ARCHITECT.
9. HEAD GUARDS TO BE PROVIDED IN ACCORDANCE WITH N.F.P.A.
10. FIRE SPRINKLER TEST VALVES TO BE LOCATED IN AREAS CONVENIENT TO MAINTENANCE PERSONNEL, BUT AWAY FROM PUBLIC ACCESS.
11. THE UTAH STATE FIRE MARSHALS OFFICE SHALL BE NOTIFIED (IN WRITING) AT LEAST THREE DAYS IN ADVANCE OF THE FOLLOWING:
    A. HYDROSTATIC TEST AND FINAL INSPECTION OF OVERHEAD SYSTEMS PRIOR TO INSTALLATION OF CEILINGS.
    B. FLUSHING OF UNDERGROUND PRIOR TO CONNECTION OF OVERHEAD.
    C. HYDROSTATIC TEST AND FINAL INSPECTION OF UNDERGROUND PRIOR TO BACKFILLING.
12. CONTRACTOR SHALL FIELD VERIFY ALL PIPE LOCATIONS PRIOR TO FABRICATION OF PIPE SYSTEMS.
13. FIRE PROTECTION DRAWINGS ARE DIAGRAMMATIC ONLY.
14. FIRE PROTECTION CONTRACTOR SHALL COORDINATE ROUTING, HANGING AND BRACING WITH ROOF STRUCTURE. ALL FIRE SPRINKLER PIPING SHALL COMPLY WITH THE FOLLOWING.
    A. ALL PIPING CONCENTRATED LOADS GREATER THAN 100 POUNDS SUPPORTED BY OPEN WEB STEEL JOISTS AND GIRDERS SHALL BE LOCATED WITHIN 6 INCHES OF JOIST OR GIRDER PANEL POINTS OR THE JOIST OR GIRDER SHALL BE REINFORCED WITH AN ADDITIONAL WEB MEMBER. REFER TO GENERAL STRUCTURAL NOTES AND THE "TYPICAL DETAIL AT ADDITIONAL CONCENTRATED POINT LOAD" ON THE STRUCTURAL DRAWINGS.
    B. CONCENTRATED POINT LOADS, SINGLE OR MULTIPLE, TOTALING 100 POUNDS OR LESS CAN BE LOCATED AT ANY POINT ALONG THE BOTTOM CHORD OF AN OPEN WEB JOIST OR GIRDER BETWEEN ADJACENT PANEL POINTS WITHOUT MEETING THE REQUIREMENTS ABOVE. A LIMIT OF (4) CONCENTRATED 100# MAXIMUM POINT LOADS PER JOIST OR GIRDER SHALL BE PERMITTED UNLESS SPECIFICALLY NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.
    C. JOIST BRIDGING SHALL NEVER BE USED TO SUPPORT HANGING LOADS.
    D. BRACING OF FIRE SPRINKLER PIPING TO THE BOTTOM CHORD OF JOISTS OR GIRDERS WILL NOT BE ALLOWED IN ANY INSTANCE. ALL LATERAL BRACES MUST CONNECT TO THE TOP FLANGE/TOP CHORD OF THE FRAMING MEMBER ABOVE UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.
    E. **PIPING SHALL BE BRACED TO RESIST BOTH LATERAL AND LONGITUDINAL SEISMIC LOADS. EARTHQUAKE BRACING CALCULATIONS TO BE MADE WITH Ss VALUE IN STRUCTURAL DRAWINGS.**
    F. **RESTRAINTS OR LATERAL SWAY BRACES SHALL BE PROVIDED ON BRANCHLINES WHERE PIPING IS NOT SUPPORTED WITHIN 6 IN. OF THE STRUCTURE.**
15. STEEL ROOF DECKING SHALL NOT BE USED TO SUPPORT LOADS FROM FIRE SPRINKLER ELEMENTS OR EQUIPMENT OF ANY KIND.
16. ALL FIRE SPRINKLER PIPING RUNNING IN OCCUPIED AREAS WITH EXPOSED STRUCTURE SHALL RUN WITH SLOPE OF ROOF DECK.
17. FIRE SPRINKLER CONTRACTOR SHALL COORDINATE ANY CROSSOVERS OR DROPS AT MAIN CORRIDOR TO AVOID CONFLICTS WITH SKYLIGHTS. DROPS & CROSSOVER LOCATIONS SHALL BE VERIFIED WITH PROJECT ARCHITECT PRIOR TO INSTALLATION.
18. ALL FIRE MAINS SHALL RUN ABOVE AREAS WITH CEILINGS. NO MAINS WILL BE ALLOWED IN OCCUPIED AREAS EXPOSED TO ROOF DECK.
19. IN EXPOSED AREAS THE FIRE SPRINKLER CONTRACTOR SHALL COORDINATE PIPING & HEAD LOCATIONS WITH HVAC DUCTWORK, DIFFUSERS AND ALL LIGHTING LAYOUT.
20. FIRE SPRINKLER HEADS IN ALL CORRIDORS SHALL BE INSTALLED AS CLOSE TO THE CENTERLINE OF THE CORRIDOR AS POSSIBLE.
21. FIRE SPRINKLER HEADS SHALL BE INSTALLED IN THE CENTER QUARTER PANEL OF CEILING TILES.
22. ALL SPRINKLER MAINS SHALL RUN THRU TRUSSES OR BETWEEN TRUSSES IN TRUSS SPACE. INSTALLING MAINS BELOW BOTTOM CHORD OF TRUSSES WILL NOT BE ALLOWED.
23. FIRE SPRINKLER CONTRACTOR SHALL CAREFULLY COORDINATE SPRINKLER SYSTEM WITH ARCHITECTURAL REFLECTED CEILING PLANS FOR VARIATIONS IN CEILING TYPE AND CEILING ELEVATION CHANGES.
24. WHERE RISERS ROOMS CONTAIN A MANIFOLD WITH MORE THAN ONE RISER, EACH SYSTEM SHALL HAVE A SEPARATE CHECK VALVE, BUTTERFLY VALVE, FLOW SWITCH, TEST & DRAIN ASSEMBLY AND PRESSURE GAUGE.
25. **ALL FIRE HEADS AT CORRIDORS SHALL BE LOCATED AT CENTER OF TILE.**
26. **ALL FIRE HEADS AT CLASSROOM AND ADMINISTRATION AREAS SHALL BE LOCATED AT CENTER OF TILE AND 1/4 POINTS.**
27. **FIRE DEPARTMENT CONNECTION SHALL BE A DUPLEX TYPE WITH LOCKING KNOX CAPS PER WSD STANDARDS AND LOCAL FIRE AUTHORITY REQUIREMENTS.**

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	11-22-23	Addendum 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

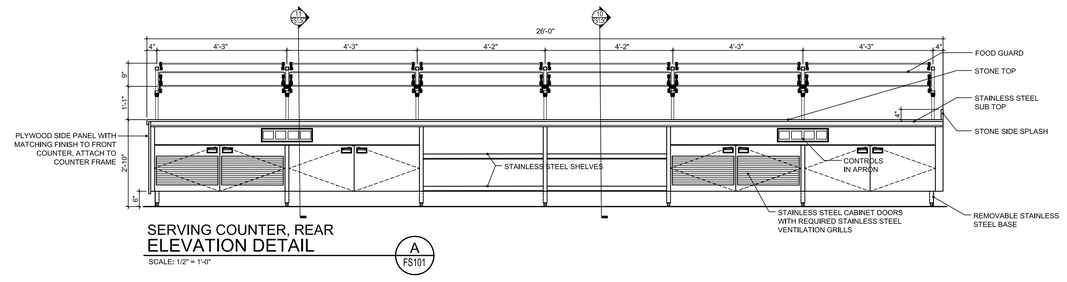
BID PACKAGE 5 - GENERAL CONSTRUCTION

FIRE PROTECTION DETAILS

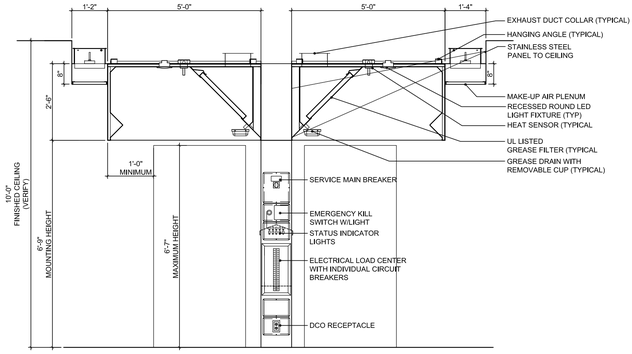
2

FP601

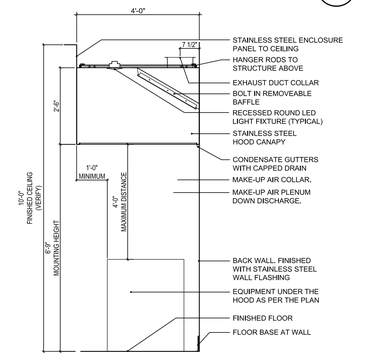
11/22/2023 10:54:30 AM



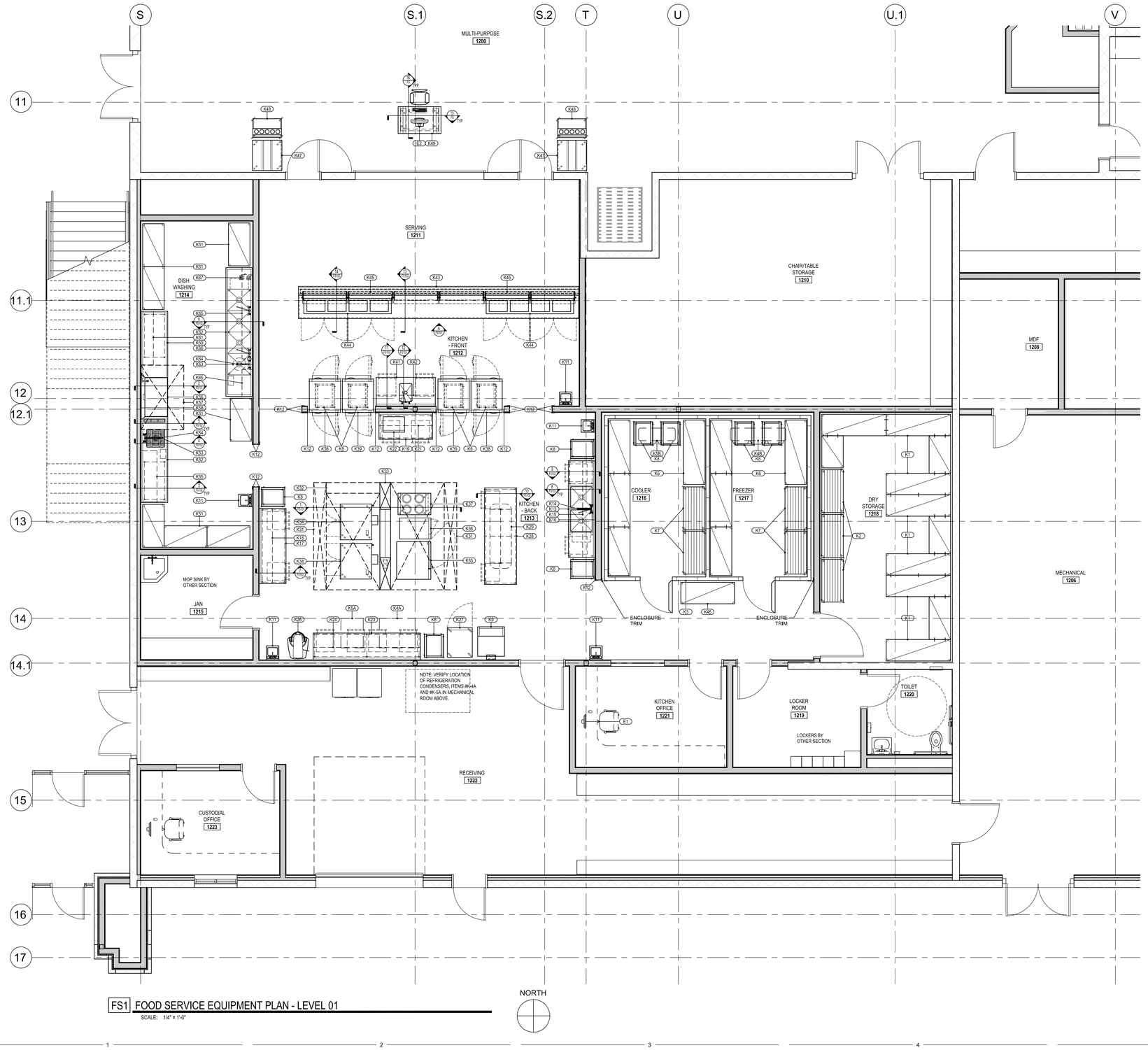
SERVING COUNTER, REAR
ELEVATION DETAIL
SCALE: 1/2" = 1'-0"
A FS101



EXHAUST HOOD
SECTION DETAIL
SCALE: 1/2" = 1'-0"
1 FS101



VENT HOOD
SECTION DETAIL
SCALE: 1/2" = 1'-0"
2 FS101

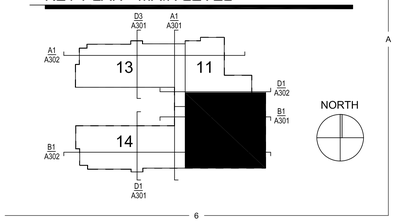


FS1 FOOD SERVICE EQUIPMENT PLAN - LEVEL 01
SCALE: 1/4" = 1'-0"

SCHEDULE: FOOD SERVICE EQUIPMENT

ITEM	QTY	UNIT	DESCRIPTION
#K-1	1	LOT	DRY STORAGE SHELVING
#K-2	1	LOT	STORAGE DUNNAGE RACKS; MOBILE
#K-3	1	LOT	WALK-IN COOLER AND FREEZER BOX
#K-4A	1	SYS	WALK-IN FREEZER REFRIGERATION; CONDENSER
#K-4B	1	SYS	WALK-IN FREEZER REFRIGERATION; BLOWER COILS
#K-5A	1	SYS	WALK-IN COOLER REFRIGERATION; CONDENSER
#K-5B	1	SYS	WALK-IN COOLER REFRIGERATION; BLOWER COILS
#K-6	1	LOT	WALK-IN SHELVING
#K-7	1	LOT	WALK-IN DUNNAGE RACKS; MOBILE
#K-8	12	EACH	SPEED RACK; MOBILE
#K-9	1	EACH	ICE MAKER AND BIN
#K-10	-	-	SPARE NUMBER
#K-11	5	EACH	WALL MOUNT HAND SINK
#K-12	1	LOT	STAINLESS STEEL CORNER GUARDS; FULL HEIGHT
#K-13	1	EACH	STAINLESS STEEL TWO COMPARTMENT SINK WORK TABLE; 9'-0"W
#K-14	1	EACH	LOW PROFILE PRE-RINSE/FAUCET
#K-15	1	EACH	STAINLESS STEEL WALL SHELF; 9'-0"W
#K-16	1	EACH	STAINLESS STEEL WALL FLASHING
#K-17	1	EACH	STAINLESS STEEL WORK TABLE; 7'-0"W
#K-18	1	EACH	STAINLESS STEEL WALL SHELF; 7'-0"W
#K-19	1	EACH	STAINLESS STEEL WORK TABLE; 5'-0"W
#K-20	-	-	SPARE NUMBER
#K-21	1	EACH	STAINLESS STEEL WALL SHELF; 5'-0"W
#K-22	1	EACH	MICROWAVE OVEN
#K-23	1	EACH	STAINLESS STEEL WORK TABLE; 10'-0"W
#K-24	1	EACH	STAINLESS STEEL WALL SHELF; 10'-0"W
#K-25	-	-	SPARE NUMBER
#K-26	1	EACH	30 QUART MIXER
#K-27	1	EACH	HOT HOLDING/PROOF BOX; MOBILE
#K-28	1	EACH	STAINLESS STEEL WORK TABLE; 9'-0"W X 3'-0"D
#K-29	1	EACH	STAINLESS STEEL TABLE MOUNT UTENSIL RACK; 6'-0"W X 2'-0"D
#K-30	-	-	SPARE NUMBER
#K-31	2	EACH	STAINLESS STEEL EXHAUST HOOD; TYPE I
#K-32	1	SYS	FIRE PROTECTION SYSTEM
#K-33	1	EACH	UTILITY DISTRIBUTION SYSTEM
#K-34	2	EACH	STACKED CONVECTION OVEN; GAS
#K-35	1	EACH	COMBI-OVEN; GAS, TEN PAN
#K-36	1	EACH	CONVECTION STEAMER; GAS
#K-37	1	EACH	FOUR BURNER INDUCTION RANGE; CABINET BASE, ELECTRIC
#K-38	2	EACH	ROLL-THROUGH HOT FOOD HOLDING CABINET
#K-39	2	EACH	ROLL-THROUGH REFRIGERATOR
#K-40	-	-	SPARE NUMBER
#K-41	1	EACH	STAINLESS STEEL UTILITY COUNTER; WITH INTEGRAL UTILITY SINK, 5'-6"W
#K-42	1	EACH	STAINLESS STEEL WALL SHELF; 5'-6"W
#K-43	1	EACH	SERVICE COUNTER
#K-44	2	EACH	DROP-IN HOT/COLD/FROZEN DISPLAY; FOUR PAN
#K-45	2	EACH	SELF SERVE FOOD GUARD/DISPLAY SHELF; 8'-6"W
#K-46	1	LOT	KITCHEN SHELVING
#K-47	2	EACH	MILK COOLER; EIGHT CRATE CAPACITY; MOBILE
#K-48	2	EACH	TRAY AND UTENSIL CART; MOBILE
#K-49	1	EACH	CASHIER STAND; MOBILE
#K-50	-	-	SPARE NUMBER
#K-51	1	LOT	DISHROOM SHELVING
#K-52	1	EACH	STAINLESS STEEL DIRTY DISH TABLE
#K-53	1	EACH	DISPOSER
#K-54	1	EACH	PRE-RINSE SPRAY
#K-55	1	EACH	STAINLESS STEEL RACK WALL SHELF
#K-56	1	EACH	CONVEYOR DISHMACHINE; ELECTRIC
#K-57	1	EACH	STAINLESS STEEL VENT HOOD; TYPE II
#K-58	1	EACH	STAINLESS STEEL WALL FLASHING
#K-59	1	EACH	STAINLESS STEEL CLEAN DISH TABLE
#K-60	-	-	SPARE NUMBER
#K-61	1	EACH	STAINLESS STEEL WALL SHELF
#K-62	1	EACH	STAINLESS STEEL FOUR COMPARTMENT SINK
#K-63	1	EACH	DISPOSER
#K-64	1	EACH	PRE-RINSE SPRAY FAUCET
#K-65	1	EACH	STAINLESS STEEL WALL SHELF RACK; TWO SECTION
#K-66	1	EACH	STAINLESS STEEL WALL FLASHING
#K-67	1	EACH	HOSE REEL
#E-1	1	EACH	BASE COMPUTER; BY OWNER
#E-2	1	EACH	CASH REGISTER COMPUTER; BY OWNER

KEY PLAN - MAIN LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

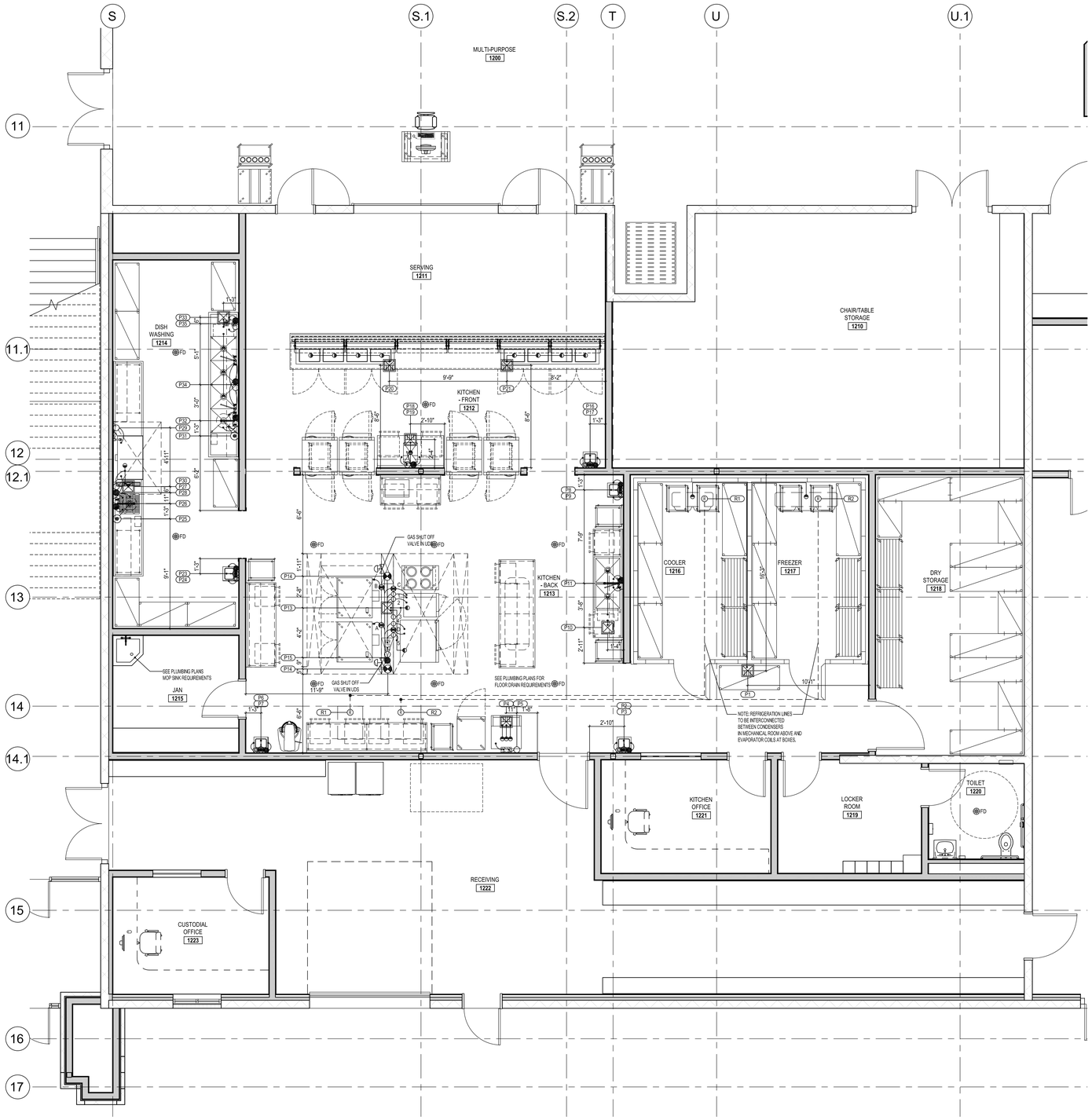
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 12 FOOD SERVICE EQUIPMENT PLAN

FS101



FS1 FOOD SERVICE EQUIPMENT PLUMBING REQUIREMENT PLAN - LEVEL 01

SCALE: 1/4" = 1'-0"

NORTH

PLUMBING NOTES

1. PLUMBING PLANS SHOW ROUGH-IN POINTS AND SCHEDULED CONNECTIONS. KITCHEN EQUIPMENT CONTRACTOR WILL PROVIDE DIMENSIONED ROUGH-IN DRAWING FOR CONSTRUCTION.
2. WATER PRESSURE IN FOOD AND BEVERAGE AREAS SHOULD BE 50 PSIG (345 KPa) MAXIMUM. WATER PRESSURE AT DISHMACHINES, BOOSTER HEATERS, GLASS AND UTENSIL WASHERS TO BE 25 PSIG (172 KPa).
3. PLUMBING DIVISION SHALL FURNISH AND INSTALL ALL NECESSARY VALVES, TRAPS, TAIL PIECES, LINE STRAINERS, WATER PRESSURE REDUCING VALVES AND VACUUM BREAKERS AND CONNECT ALL WATER, FUEL GAS, STEAM AND WASTE LINES TO FOOD SERVICE AND BEVERAGE EQUIPMENT.
4. PLUMBING CONTRACTOR TO PROVIDE GAS SERVICES AT EQUIPMENT TO MAINTAIN AN 8" (203MM) WATER COLUMN. KITCHEN EQUIPMENT CONTRACTOR TO PROVIDE GAS PRESSURE REGULATORS AS REQUIRED BY CODE AND A.G.A. FOR INSTALLATION BY PLUMBING DIVISION INLINE BETWEEN BUILDING SERVICES AND EQUIPMENT.
5. PLUMBING DIVISION TO SUPPLY GAS SHUT OFF VALVE AT EACH EQUIPMENT CONNECTION AND INSTALL WITHIN EQUIPMENT SPREADERS OR CHASES FOR EASY ACCESSIBILITY.
6. MECHANICAL ENGINEER TO SIZE GAS ROUGH-IN FOR COOKING LINES; SCHEDULES SHOW LOADS ONLY FOR EACH PIECE NOT THE TOTAL. LOOP GAS SERVICES WHEN PRACTICAL.
7. PLUMBING DIVISION SHALL INSTALL AND CONNECT ALL FAUCETS FURNISHED BY KEC.
8. PLUMBING DIVISION SHALL FURNISH AND INSTALL ALL INDIRECT SINK WASTE LINES TO FLOOR SINKS.
9. PLUMBING DIVISION TO PROVIDE ADEQUATE CLEAN-OUT FOR DRAIN LINES.
10. KITCHEN EQUIPMENT CONTRACTOR SHALL FURNISH AND INSTALL FIRE PROTECTION SYSTEM (INCLUDING FURNISHING SOLENOID SHUTOFF VALVES) PLUMBING DIVISION SHALL INSTALL SHUTOFF VALVE. VERIFY LOCATION WITH KEC.
11. FLOOR SINKS SHALL BE INSTALLED FLUSH WITH FINISH FLOOR OR PER LOCAL CODE WITH REMOVEABLE GRATE COVER AS INDICATED.
12. FLOOR DRAINS INDICATED ARE FOR FOOD AND BEVERAGE AREAS ONLY ADDITIONAL GENERAL PURPOSE AREA DRAINS SHALL BE LOCATED BY THE PLUMBING ENGINEER/ ARCHITECT.

PLUMBING LEGEND

- HOT WATER
- COLD WATER
- GAS
- DIRECT WASTE DRAIN
- INDIRECT WASTE DRAIN
- FLOOR SINK WITH NO GRATE COVER
- FLOOR SINK WITH 1/2 GRATE COVER
- STUB UP FROM FLOOR
- MOUNT AT FLOOR
- DROP FROM ABOVE
- FLOOR DRAIN

NOTE: PLUMBING MOUNTING

ALL WALL MOUNT PLUMBING UTILITIES ARE TO BE FLUSH MOUNTED IN WALLS WITH NO EXPOSED PIPING SHOWING ON SURFACE OF WALLS, ARCHITECT TO PROVIDE MINIMUM WALL FURING IF REQUIRED.

NOTE: PLUMBING COORDINATION

KITCHEN EQUIPMENT CONTRACTOR TO VERIFY AND COORDINATE PROPER LOCATION AND SIZE OF GENERAL CONTRACTOR FURNISHED STRUCTURAL PENETRATIONS AND PLUMBING DIVISION FURNISHED SLEEVES THRU FLOOR.

PLUMBING ROUGH-IN/FINAL CONNECTION SCHEDULE

ROUGH-IN REQUIREMENTS				CONNECTION REQUIREMENTS					REMARKS
Rq#	ROUGH-IN TYPE	SIZE	HGT	#	ITEM #: EQUIPMENT DESCRIPTION	SIZE	HGT	REMARK
P-01	FLOOR SINK	2"	+0"	A	#K4B : WALK-IN FREEZER: EVAPORATOR COIL	3/4"	+78"	NOTE #1. HALF GRATE TOP.
				B	#K5B : WALK-IN COOLER; EVAPORATOR COIL	3/4"	+78"	NOTE #1.
P-02	DIRECT DRAIN	1-1/2"	+18"	–	#K11 : HAND SINK	1-1/2"	+24"	–
P-03	HOT & COLD WATER	1/2"	+22"	–	#K11 : HAND SINK	1/2"	+36"	–
P-04	FLOOR SINK	2"	+0"	A	#K9 : ICE MAKER	3/8"	+42"	HALF GRATE TOP. NOTE #1 & #4.
				B	#K9 : ICE MAKER	3/4"	+42"	NOTE #1 & #4.
				C	#K9 : ICE BIN	1"	+4"	NOTE #1 & #4.
P-05	COLD WATER	1/2"	+72"	–	#K9 : ICE MAKER	1/2"	+54"	INSTALL IN LINE FILTER SYSTEM.
P-06	DIRECT DRAIN	1-1/2"	+18"	–	#K11 : HAND SINK	1-1/2"	+24"	–
P-07	HOT & COLD WATER	1/2"	+22"	–	#K11 : HAND SINK	1/2"	+36"	–
P-08	DIRECT DRAIN	1-1/2"	+18"	–	#K11 : HAND SINK	1-1/2"	+24"	–
P-09	HOT & COLD WATER	1/2"	+22"	–	#K11 : HAND SINK	1/2"	+36"	–
P-10	FLOOR SINK	2"	+0"	–	#K13 : TWO COMPARTMENT SINK	1-1/2"	+24"	NOTE #1. TWO EACH CONNECTIONS. RUN THROUGH PRE-FILTER TO FLOOR SINK.
P-11	HOT & COLD WATER	1/2"	+12"	–	#K14 : TWO COMPARTMENT SINK; PRE-RINSE FAUCET	1/2"	+36"	–
P-12	NOT USED							
P-13	FLOOR SINK	2"	+0"	A	#K35 : COMBI-OVEN	2"	+38"	NOTE #1. COPPER DRAIN PIPE REQUIRED.
				B	#K36 : CONVECTION STEAMER	1-1/2"	+10"	NOTE #1. COPPER DRAIN PIPE REQUIRED.
P-14	NATURAL GAS	1-1/4"	DFA	–	#K33 : UTILITY DISTRIBUTION SYSTEM	–	–	PROVIDE DOUBLE POINT LOOP CONNECTION TO UDS TO SUPPLY ITEMS A THROUGH D BELOW. NOTE #2. TOTAL 1200 MBH WITH 70% MBH FUTURE CAPACITY.
				A	#K34 : CONVECTION OVEN	3/4"	+30"	100,000 BTU/HR. NOTE #2, #3 & #4. 5" W.C. REQUIRED.
				B	#K34 : CONVECTION OVEN	3/4"	+30"	100,000 BTU/HR. NOTE #2, #3 & #4. 5" W.C. REQUIRED.
				C	#K36 : CONVECTION STEAMER	3/4"	+18"	144,000 BTU/HR. NOTE #2, #3 & #4. 4.5"-14" W.C. REQUIRED.
				D	#K35 : COMBI-OVEN	3/4"	+36"	152,000 BTU/HR. NOTE #2 & #3. 6.5"-10" W.C. REQUIRED.
P-15	COLD WATER	1"	DFA	–	#K38 : UTILITY DISTRIBUTION SYSTEM	–	–	PROVIDE SINGLE POINT CONNECTION TO UDS TO SUPPLY ITEMS 1 THROUGH 5 BELOW. NOTE #2. WATER FILTER IS CONNECTED IN THE UDS.
				1	#K36 : CONVECTION STEAMER; GENERATOR	3/8"	+6"	FEED TO BE 35 TO 60 PSI. FEED CONNECTS FROM FILTER IN UDS SYSTEM.
				2	#K36 : CONVECTION STEAMER; CONDENSER	3/8"	+6"	FEED TO BE 35 TO 60 PSI.
				3	#K36 : CONVECTION STEAMER	1"	+6"	INTERCONNECT COLD TO DRAIN TEMPERING KIT.
				4	#K35 : COMBI-OVEN: TOP	3/4"	+30"	3.17 GPM @ 14.5-87 PSI. FEED CONNECTS FROM FILTER IN UDS SYSTEM.
				5	#K35 : COMBI-OVEN	1"	+6"	INTERCONNECT COLD TO DRAIN TEMPERING KIT IN MANIFOLD DRAIN.
P-15A	HOT WATER	1"	DFA	–	#K38 : UTILITY DISTRIBUTION SYSTEM	–	–	PROVIDE SINGLE POINT CONNECTION TO UDS FOR FUTURE USE.
P-16	DIRECT DRAIN	1-1/2"	+18"	–	#K11 : HAND SINK	1-1/2"	+24"	–
P-17	HOT & COLD WATER	1/2"	+22"	–	#K11 : HAND SINK	1/2"	+36"	–
P-18	FLOOR SINK	2"	+0"	–	#K41 : UTILITY SINK	1-1/2"	+24"	HALF GRATE TOP. NOTE #1
P-19	HOT & COLD WATER	1/2"	+12"	–	#K41 : UTILITY SINK	1/2"	+36"	–
P-20	FLOOR SINK	2"	+0"	–	#K44 : HOT/COLD/FROZEN FOOD PAN	3/4"	+24"	HALF GRATE TOP. NOTE #1. INSTALL ACCESSIBLE DRAIN VALVE.
P-21	FLOOR SINK	2"	+0"	–	#K44 : HOT/COLD/FROZEN FOOD PAN	3/4"	+24"	HALF GRATE TOP. NOTE #1. INSTALL ACCESSIBLE DRAIN VALVE.
P-22	NOT USED							
P-23	DIRECT DRAIN	1-1/2"	+18"	–	#K11 : HAND SINK	1-1/2"	+24"	–
P-24	HOT & COLD WATER	1/2"	+22"	–	#K11 : HAND SINK	1/2"	+36"	–
P-25	DIRECT DRAIN	2"	+10"	–	#K53 : DISPOSER	2"	+12"	–
P-26	HOT & COLD WATER	1/2"	+12"	A	#K54 : PRE-RINSE FAUCET	1/2"	+36"	–
				B	#K53 : DISPOSER	1/2"	+24"	COLD WATER ONLY.
P-27	FLOOR SINK			A	#K56 : DISHWASHER	2"	+4"	HALF GRATE TOP. NOTE #1.
				B	#K52 : DIRTY DISH TABLE	1"	+26"	NOTE #1.
P-28	HOT WATER	1/2"	+18"	–	#K56 : DISHWASHER	1/2"	+12"	WATER IN: MIN 110 F. 15-25 PSI.
P-29	COLD WATER	1/2"	+18"	–	#K56 : DISHWASHER	1/2"	+8"	WATER IN: MAX 80 F. 15-25 PSI.
P-30	COLD WATER	1/2"	+12"	–	#K56 : DISHWASHER	1/2"	+6"	INTERCONNECT TO DRAIN TEMPERING KIT.
P-31	DIRECT DRAIN	2"	+10"	–	#K63 : DISPOSER	2"	+12"	–
P-32	HOT & COLD WATER	1/2"	+12"	A	#K64 : PRE-RINSE FAUCET	1/2"	+36"	–
				B	#K63 : DISPOSER	1/2"	+24"	COLD WATER ONLY.
P-33	FLOOR SINK	2"	+0"	–	#K62 : FOUR COMPARTMENT SINK	1-1/2"	+24"	NOTE #1. THREE EA CONNECTIONS. RUN THROUGH PRE-FILTER TO FLOOR SINK.
P-34	HOT & COLD WATER	1/2"	+12"	–	#K62 : FOUR COMPARTMENT SINK; FAUCET	1/2"	+36"	TWO EACH CONNECTIONS.
P-35	HOT & COLD WATER	1/2"	+18"	–	#K67 : HOSE REEL	1/2"	+28"	CONNECT FROM ROUGH-IN TO MIXING VALVE MOUNTED TO UNDERSIDE OF DISHTABLE AND INTERCONNECT THROUGH VACUUM BREAKER TO HOSE REEL CONNECTION BELOW DISH TABLE.

NOTE #1: PROVIDE INDIRECT AIR GAP DRAIN TO FLOOR SINK.

NOTE #2: K.E.C. TO PROVIDE QUICK DISCONNECT COUPLINGS AT UDS WATER ROUGH-IN AND FINAL CONNECTION. FOR PLUMBING CONTRACTOR TO INSTAL

NOTE #3: ROUGH-INS ARE FED FROM ITEM #K-33 ENERGY DISTRIBUTION SYSTEM. HEAVY DUTY HOSES WITH QUICK DISCONNECTS AND RESTRAINING DEVICES ARE FURNISHED AS PART OF THE SYSTEM BY THE KEC. THE PLUMBING CONTRACTOR IS TO INSTALL THESE FLEX HOSES TO EACH ITEM AS REQUIRED. PLUMBING CONTRACTOR SHALL FURNISH ALL ADDITIONAL MATERIAL AS REQUIRED AND MAKE ALL INTERCONNECTIONS AS REQUIRED.

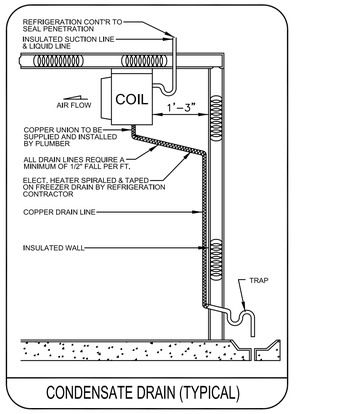
NOTE #4: K.E.C. TO PROVIDE PRESSURE REGULATOR AT GAS FINAL CONNECTION AS REQUIRED TO ADJUST FOR ALTITUDE. PLUMBING CONTRACTOR TO INSTALL.

REFRIGERATION ROUGH-IN/FINAL CONNECTION SCHEDULE

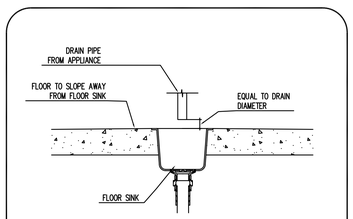
ROUGH-IN REQUIREMENTS				CONNECTION REQUIREMENTS				REMARKS
Rq#	ROUGH-IN TYPE	SIZE	HGT	#	ITEM #: EQUIPMENT DESCRIPTION	SIZE	HGT	REMARK
R1	REF. LINES: SUCTION	–	DFA	–	#K5 : WALK-IN COOLER REFRIGERATION	–	VER.	CONNECT FROM EVAPORATOR COIL TO
	REF. LINES: LIQUID	–	DFA			–	VER.	REMOTE CONDENSER ON ROOF ABOVE.
R2	REF. LINES: SUCTION	–	DFA	–	#K4 : WALK-IN FREEZER REFRIGERATION	–	VER.	CONNECT FROM EVAPORATOR COIL TO
	REF. LINES: LIQUID	–	DFA			–	VER.	REMOTE CONDENSER ON ROOF ABOVE.

NOTE #1: K.E.C. TO SIZE REFRIGERATION LINES AS REQUIRED FOR PROPER OPERATION OF REFRIGERATION UNITS. VERIFY LOCATION OF CONDENSERS ON ROOF.

NOTE #2: GENERAL CONTRACTOR IS TO PROVIDE WALL, FLOOR AND CEILING PENETRATIONS TO ACCOMODATE REFRIGERATION LINES FROM ROUGH-IN LOCATIONS TO CONDENSER LOCATIONS IN MECHANICAL ROOM.

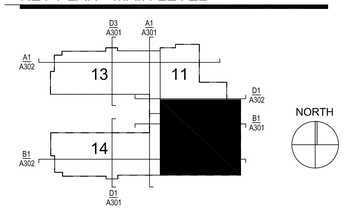


CONDENSATE DRAIN (TYPICAL)



FLOOR SINK SECTION DETAIL

KEY PLAN - MAIN LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

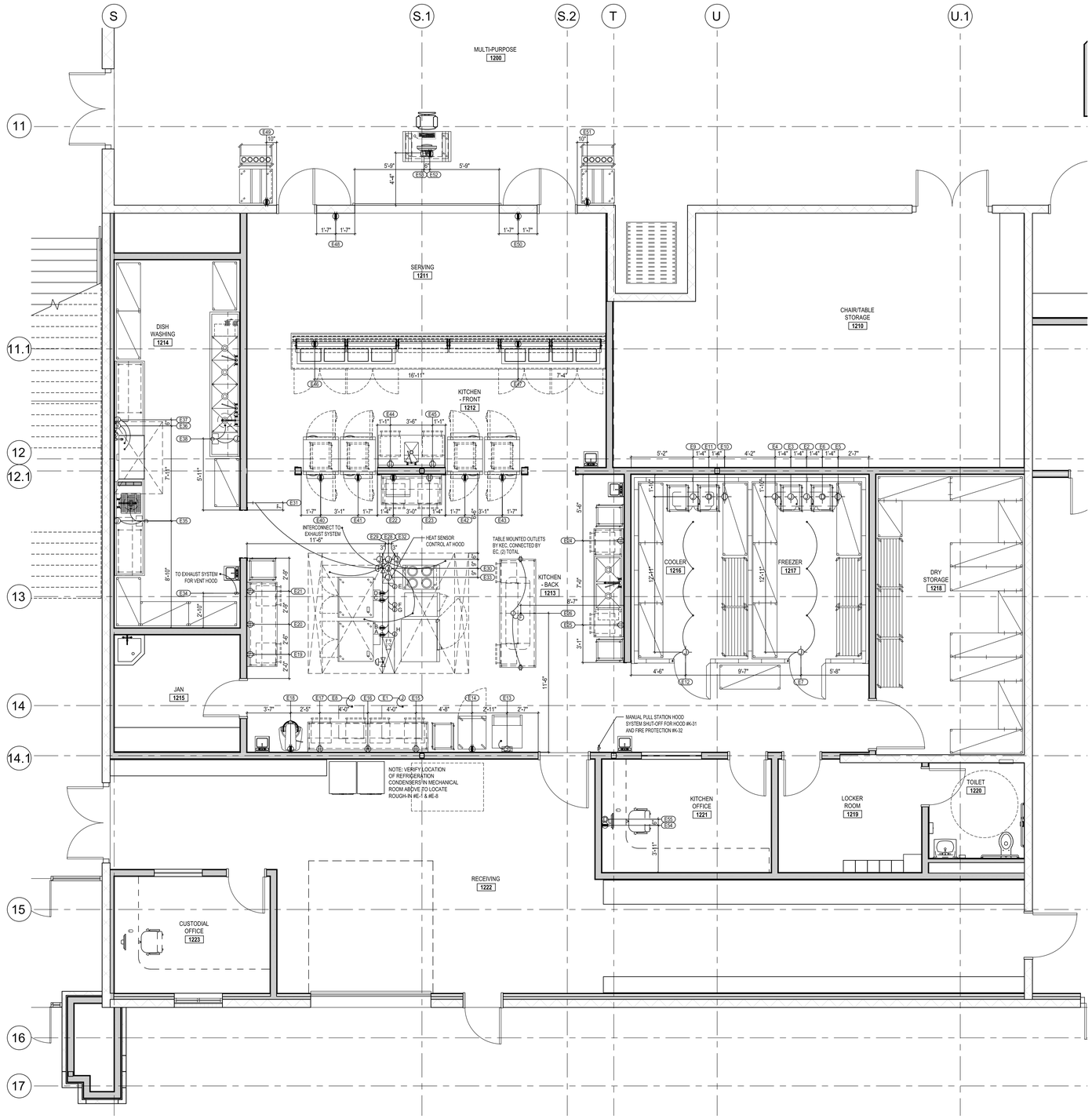
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 12 FOOD SERVICE EQUIPMENT PLUMBING REQUIREMENT PLAN

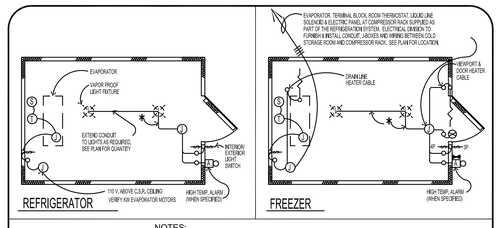
FS301



FS1 FOOD SERVICE EQUIPMENT ELECTRICAL REQUIREMENT PLAN - LEVEL 01

SCALE: 1/4" = 1'-0"

NORTH



- J JUNCTION BOX
- T THERMOSTAT
- S LIQUID LINE SOLENOID
- EYS & NIPPLE FOR CEILING PENETRATION TO SPLICE BOX
- HEATED VACUUM VENT

C.S.R. - COLD STORAGE ROOM

EMT RIGID CONDUIT RUN ABOVE C.S.R. CEILING BY ELEC. DIVISION (TYP)

110 V, ABOVE COLD STORAGE ROOM CEILING
- 4 #12 AWG
- 1 #6 GND
- XX LIGHTS EACH
- XX NEWPORT & DOOR HEATER (FREEZER)
- XX HIGH TEMP. ALARM (WHEN SPECIFIED)

NOTES:

1. LIGHT FIXTURES, SWITCH BOXES, SWITCHES, & SPLICE BOXES ARE FURNISHED LOOSE WITH COLD STORAGE ROOMS. ELECTRICAL DIVISION TO INSTALL ALL ITEMS FURNISHED LOOSE INCLUDING ALL INTERCONNECTING CONDUIT & WIRING.
2. EVAPORATORS FOR COLD STORAGE ROOM ARE FURNISHED & INSTALLED COMPLETE WITH ROOM THERMOSTAT, LIQUID LINE SOLENOID & DISCONNECT SWITCH. ELECTRICAL DIVISION TO PROVIDE INTERCONNECTING CONDUIT & WIRING FORM BUILDING SERVICE TO ALL COMPONENTS.
3. ELECTRICAL DIVISION TO PROVIDE ALL BUILDING SERVICES INCLUDING J-BOXES, INTERCONNECTING CONDUIT & WIRING FROM BUILDING SERVICE TO COMPONENTS.
4. EYS FITTING FURNISHED WITH COLD STORAGE ROOMS. ELECTRICAL DIVISION TO INSTALL, WIRE & SEAL BY ACCEPTED INDUSTRY PRACTICE.
5. STAINLESS STEEL ESCUTCHEON PLATES & HOLES THROUGH INSULATED PANELS ARE FURNISHED WITH COLD STORAGE ROOM. ELECTRICAL DIVISION TO SEAL ALL PENETRATIONS WITH CAULKING ON THE C.S.R. INTERIOR & EXTERIOR AND INSTALL INTERIOR & EXTERIOR ESCUTCHEON PLATES.
6. EVAPORATOR FAN MOTORS FOR REFRIGERATORS RUN CONTINUOUSLY. DO NOT WIRE INTERNALLY WITH THERMOSTAT. EVAPORATOR FAN MOTORS FOR FREEZERS CYCLE WITH FREEZER DEFROST.

TYPICAL COLD STORAGE ROOMS ELEC. DIAGRAM

ELECTRICAL ROUGH-IN/FINAL CONNECTION SCHEDULE

ROUGH-IN REQUIREMENTS			CONNECTION REQUIREMENTS					REMARKS
REF	ROUGH-IN TYPE	HGT.	ITEM #	EQUIPMENT DESCRIPTION	VLT/CYC/PH	LOAD	CONN	REMARK
E-01	JUNCTION BOX	+42"	#K4A	FREEZER REFRIGERATION: CONDENSER	208/60/3	12.3 AMP	J-BOX	VERIFY LOCATION OF REMOTE IN MECHANICAL ROOM ABOVE.
E-02	JUNCTION BOX	DFA	#K4B	FREEZER REFRIGERATION: EVAPORATOR	208/60/1	1 AMP	J-BOX	INTERCONNECT CONTROLS WITH REMOTE CONDENSER.
E-03	JUNCTION BOX	DFA	#K4B	FREEZER REFRIGERATION: DEFROST	208/60/1	9.8 AMP	J-BOX	INTERCONNECT DEFROST WITH REMOTE CONDENSER.
E-04	JUNCTION BOX	DFA	#K4B	FREEZER REFRIGERATION: HEAT TRACE	120/60/1	3 AMP	J-BOX	CONNECT TO DRAIN HEAT CABLE.
E-05	OUTLET	DFA	#K4B	TEMPERATURE MONITOR	120/60/1	2 AMP	C&P	–
E-06	DATA OUTLET	DFA	#K4B	FREEZER REFRIGERATION SYSTEM	–	–	–	RUN CONDUIT FOR DATA CABLE TO OFFICE
E-07	JUNCTION BOX	DFA	#K3	WALK-IN FREEZER: LIGHTS AND HEATER	115/60/1	2.29 AMP	J-BOX	INTERCONNECT (4) LIGHTS.
E-08	JUNCTION BOX	+42"	#K5A	WALK-IN COOLER REF: CONDENSER	208/60/3	9.4 AMP	J-BOX	VERIFY LOCATION OF REMOTE IN MECHANICAL ROOM ABOVE.
E-09	JUNCTION BOX	DFA	#K5B	WALK-IN COOLER REF: BLOWER COILS	115/60/1	1.6 AMP	J-BOX	INTERCONNECT CONTROLS WITH REMOTE CONDENSER.
E-10	DATA OUTLET	DFA	#K5B	COOLER REFRIGERATION SYSTEM	–	–	–	RUN CONDUIT FOR DATA CABLE TO I.T.
E-11	OUTLET	+108"	#K5B	TEMPERATURE MONITOR	120/60/1	2 AMP	C&P	–
E-12	JUNCTION BOX	DFA	#K3	WALK-IN COOLER: LIGHTS AND HEATER	115/60/1	1.76 AMP	J-BOX	INTERCONNECT (4) LIGHTS.
E-13	JUNCTION BOX	+72"	#K9	ICE MAKER	115/60/1	14.2 AMP	J-BOX	–
E-14	OUTLET	+18"	#K27	FOOD WARMING CABINET	120/60/1	19.1 AMP	C&P	–
E-15	CONVENIENCE OUTLET	+48"	#K23	WORK TABLE	120/60/1	10 AMP	C&P	–
E-16	CONVENIENCE OUTLET	+48"	#K23	WORK TABLE	120/60/1	10 AMP	C&P	–
E-17	CONVENIENCE OUTLET	+48"	#K23	WORK TABLE	120/60/1	10 AMP	C&P	–
E-18	OUTLET	+18"	#K26	30 QUART MIXER	120/60/1	9.5 AMP	C&P	–
E-19	CONVENIENCE OUTLET	+48"	#K17	WORK TABLE	120/60/1	10 AMP	C&P	–
E-20	CONVENIENCE OUTLET	+48"	#K17	WORK TABLE	120/60/1	10 AMP	C&P	–
E-21	CONVENIENCE OUTLET	+48"	#K17	WORK TABLE	120/60/1	10 AMP	C&P	–
E-22	OUTLET	+48"	#K22	MICROWAVE OVEN	120/60/1	17.7 AMP	C&P	–
E-23	CONVENIENCE OUTLET	+48"	#K19	WORK TABLE	120/60/1	10 AMP	C&P	–
E-24	OUTLET	+48"	#K13	PREP SINK/WORK TABLE	120/60/1	10 AMP	C&P	–
E-25	OUTLET	+48"	#K13	PREP SINK/WORK TABLE	120/60/1	10 AMP	C&P	–
E-26	OUTLET (FLEX)	STUB	#K28	WORK TABLE	120/60/1	10 AMP	C&P	NOTE #4. TWO EACH OUTLETS.
E-27	NOT USED	–	–	–	–	–	–	–
E-28	JUNCTION BOX	DFA	#K31	EXHAUST HOOD	120/60/1	900 WATT	J-BOX	INTERCONNECT WITH EXHAUST SYSTEM AND HOOD LIGHT SWITCH AND UDS LIGHT SWITCH.
E-29	JUNCTION BOX	DFA	#K32	GAS SHUT OFF VALVE	120/60/1	1 AMP	J-BOX	CONNECT TO GAS SHUT OFF PRE-WIRED IN UDS AND HOOD CONTROLS AS REQUIRED AND INTERCONNECT WITH SHUNT TRIP BREAKERS FOR HOOD EQUIPMENT. PROVIDED WITH FIVE CONTACTS.
E-30	JUNCTION BOX	DFA	#K31	EXHAUST HOOD: HEAT SENSOR	120/60/1	15 AMP	J-BOX	INTERCONNECT TO TERMINAL BLOCK PROVIDED IN UDS NOTE #5.
E-31	TEMPERATURE SENSOR	+48"	#K31	EXHAUST HOOD: HEAT SENSOR	CONTROL WIRE	–	–	INTERCONNECT FROM CONTROL BOX PROVIDED WITH HOOD.
E-32	JUNCTION BOX	DFA	#K32	FIRE PROTECTION SYSTEM	120/60/1	15 AMP	J-BOX	PROVIDED FOR ELECTRICAL SHUT DOWN INTERCONNECTION OF ELECTRICAL IN A FIRE EVENT.
E-33	JUNCTION BOX	DFA	#K33	UTILITY DISTRIBUTION SYSTEM	120/208/60/3	100 AMP	J-BOX	CONNECT MAIN POWER TO UDS SYSTEM TO POWER FOLLWING ITEMS A THROUGH H. NOTE #6. TOTAL INCLUDES FUTURE LOADS.
		A	#K34	CONVECTION OVEN	115/60/1	7.7 AMP	C&P	NOTE #6.
		B	#K34	CONVECTION OVEN	115/60/1	7.7 AMP	C&P	NOTE #6.
		C	#K34	CONVECTION OVEN	115/60/1	7.7 AMP	C&P	NOTE #6.
		D	#K34	CONVECTION OVEN	115/60/1	7.7 AMP	C&P	NOTE #6.
		E	#K37	FOUR BURNER INDUCTION RANGE	208/60/3	38.9 AMP	DIR	NOTE #6.
		F	#K36	STEAMER	120/60/1	150 WATT	DIR	NOTE #6.
		H	#K36	STEAMER	120/60/1	150 WATT	DIR	NOTE #6.
		I	#K35	COMBI-OVEN: BOTTOM	208/60/1	1500 WATT	DIR	NOTE #6.
E-34	SWITCH-EXISTING	+42"	#K57	VENT HOOD: SWITCH	120/60/1	–	–	INTERCONNECT WITH VENT HOOD EXHAUST SYSTEM.
E-35	JUNCTION BOX	+18"	#K53	DISPOSER	208/60/3	2 HP	J-BOX	INTERCONNECT WITH CONTROLS.
E-36	JUNCTION BOX	+18"	#K56	DISHWASHER	208/60/3	55.0 AMP	J-BOX	TANK HEAT, MOTORS, CONTROLS.
E-37	JUNCTION BOX	+18"	#K56	DISHWASHER	208/60/3	83.9 AMP	J-BOX	BOOSTER HEATER.
E-38	JUNCTION BOX	+18"	#K53	DISPOSER	208/60/3	2 HP	J-BOX	INTERCONNECT WITH CONTROLS.
E-39	NOT USED	–	–	–	–	–	–	–
E-40	OUTLET	+92"	#K38	ROLL-IN FOOD WARMER	208/60/1	7.8 AMP	C&P	–
E-41	OUTLET	+92"	#K39	ROLL-IN REFRIGERATOR	115/60/1	11.6 AMP	C&P	–
E-42	OUTLET	+92"	#K39	ROLL-IN REFRIGERATOR	115/60/1	11.6 AMP	C&P	–
E-43	OUTLET	+92"	#K38	ROLL-IN FOOD WARMER	208/60/1	7.8 AMP	C&P	–
E-44	CONVENIENCE OUTLET	+48"	#K41	UTILITY COUNTER	120/60/1	10 AMP	C&P	–
E-45	CONVENIENCE OUTLET	+48"	#K41	UTILITY COUNTER	120/60/1	10 AMP	C&P	–
E-46	OUTLET	STUB	#K44	HOT/COLD/FROZEN FOOD WELLS	120/60/1	23.7 AMP	C&P	INTERCONNECT CONTROLS.
E-47	OUTLET	STUB	#K44	HOT/COLD/FROZEN FOOD WELLS	120/60/1	23.7 AMP	C&P	INTERCONNECT CONTROLS.
E-48	OUTLET	+18"	#K47	MILK COOLER	120/60/1	7.2 AMP	C&P	NIGHT LOCATION
E-49	OUTLET	+18"	#K47	MILK COOLER	120/60/1	7.2 AMP	C&P	–
E-50	OUTLET	+18"	#K47	MILK COOLER	120/60/1	7.2 AMP	C&P	NIGHT LOCATION
E-51	OUTLET	+18"	#K47	MILK COOLER	120/60/1	7.2 AMP	C&P	–
E-52	OUTLET	+0"	#E2	POS COMPUTER	120/60/1	VERIFY	C&P	NOTE #1. FLUSH FLOOR MOUNT.
E-53	DATA OUTLET	+0"	#E2	POS COMPUTER	–	–	–	NOTE #2. FLUSH FLOOR MOUNT.
E-54	OUTLET	+18"	#E1	POS COMPUTER	120/60/1	VERIFY	C&P	NOTE #1.
E-55	DATA OUTLET	+18"	#E1	POS COMPUTER	–	–	–	NOTE #2.

NOTE #1: VERIFY THE REQUIREMENTS OF THE POS SYTEM WITH THE SUPPLIER INCLUDING ELECTRICAL REQUIREMENTS AND THE INTERCONNECTION REQUIREMENTS.
NOTE #2: PROVIDE DATA CONDUIT AS REQUIRED BY POS SUPPLIER. VERIFY INTERCONNECTION REQUIREMENTS BETWEEN COMPONENTS OF SYSTEM.
NOTE #3: RUN FLEX FROM STUBBED LOCATION TO OUTLET MOUNTED AT UNDERSIDE OF WORK TABLE.
NOTE #4: RUN FLEX FROM STUBBED LOCATION TO JUNCTION BOX MOUNTED AT UNDERSIDE OF WORK TABLE. OUTLETS ARE PRE-WIRED AS PART OF TABLE.
NOTE #5: ELECTRICIAN TO FIELD WIRE LOW VOLTAGE FROM EACH TEMPERATURE CONTROLLER TO HEAT SENSOR PROVIDED WITH HOOD AT EACH EXHAUST RISER. ELECTRICIAN TO INTERLOCK CONTACTORS OR STARTERS SPECIFIED BY MECHANICAL SYSTEM TO THE CONTACTS AT THE TERMINAL BLOCK TO OPERATE FAN.
NOTE #6: ROUGH-INS ARE FED FROM ITEM #K-33 ENERGY DISTRIBUTION SYSTEM. HEAVY DUTY CORDS WITH RESTRAINING DEVICES AND CORD CAPS ARE FURNISHED AS PART OF THE SYSTEM BY THE KEC. THE ELECTRICAL CONTRACTOR IS TO INSTALL THESE CORDS AND CORD CAPS TO EACH ITEM AS REQUIRED. REMOVE ANY FACTORY CORDS, IF INSTALLED ON INDIVIDUAL ITEMS. ELECTRICAL CONTRACTOR SHALL FURNISH ALL ADDITIONAL MATERIAL AS REQUIRED AND MAKE ALL INTERCONNECTIONS AS REQUIRED.

DFA: DROP FROM ABOVE
J-BOX: JUNCTION BOX CONNECTION
C&P: CORD AND PLUG CONNECTION

AMP: AMPERES
HP: HORSE POWER

ELECTRICAL NOTES

1. ELECTRICAL PLAN SHOWS ROUGH-IN POINTS AND SCHEDULED CONNECTIONS. KITCHEN EQUIPMENT CONTRACTOR WILL PROVIDE DIMENSIONED ROUGH-IN DRAWINGS FOR CONSTRUCTION.
2. ELECTRICAL SYSTEM IS DESIGNED FOR 120/208 VOLTS, 1&3 PHASE, 60 HERTZ, 4 WIRE SYSTEM.
3. ELECTRICAL DIVISION SHALL FURNISH AND INSTALL ALL JUNCTION BOXES, RECEPTACLES, COVER PLATES, PULL BOXES, CONDUIT AND WIRING EXCEPT WHERE NOTED. RECEPTACLES AND COVER PLATES SHALL BE BRUSHED STAINLESS STEEL FURNISHED BY ELECTRICAL DIVISION.
4. ALL CONDUIT RUNS INDICATED FOR REFRIGERATION, DRINK AND LIQUOR SYSTEM LINES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL DIVISION. CONDUIT SHALL HAVE 24" (600MM) MINIMUM RADIUS BENDS.
5. KITCHEN EQUIPMENT CONTRACTOR SHALL FURNISH AND INSTALL VAPOR PROOF VENTILATOR LIGHTS COMPLETE WITH LAMPS. INTERCONNECTING CONDUIT, WIRING WITH WALL SWITCH FURNISHED AND INSTALLED BY THE ELECTRICAL DIVISION.
6. ADDITIONAL CONVENIENCE RECEPTACLES, TELEPHONE AND INTERCOM JACKS AND TEMPERATURE MONITORING SYSTEM ETC.. SHALL BE LOCATED BY THE ELECTRICAL ENGINEER/ ARCHITECT AND AS REQUIRED BY CODE.
7. KITCHEN EQUIPMENT CONTRACTOR SHALL FURNISH DISPOSER CONTROLS. ELECTRICAL DIVISION SHALL FURNISH AND INSTALL INTER-CONNECTING CONDUIT AND WIRE BETWEEN SWITCH, DISPOSER AND COMPONENTS.
8. ELECTRICAL DIVISION SHALL FURNISH AND INSTALL ALL INTERCONNECTING CONDUIT AND WIRING BETWEEN MICRO-SWITCH AND SOLENOID FUEL SHUT OFF VALVE FURNISHED WITH FIRE SUPPRESSION SYSTEM SUPPLIED BY THE KITCHEN EQUIPMENT CONTRACTOR.
9. PRE-FABRICATED COLD STORAGE ROOMS ARE FURNISHED BY THE KITCHEN EQUIPMENT CONTRACTOR COMPLETE WITH SPLICE BOXES, LIGHT FIXTURES, LAMPS, LIGHT SWITCHES AND DOOR HEATERS. ELECTRICAL DIVISION TO INSTALL SAME AND SHALL FURNISH AND INSTALL INTERCONNECTING CONDUIT, WIRING SEALOFFS, SEALANT AND MAKE FINAL CONNECTIONS.
10. ELECTRICAL DIVISION SHALL FURNISH AND INSTALL ALL INTERCONNECTING CONDUIT AND WIRING BETWEEN KITCHEN EQUIPMENT CONTRACTOR FURNISHED LOW TEMP COLD STORAGE ROOM EVAPORATOR TERMINAL BLOCK, SWITCH, FAN DOOR SWITCH AND COMPRESSOR CONTROL PANEL.
11. ELECTRICAL DIVISION SHALL FURNISH AND INSTALL EMPTY CONDUIT WITH JUNCTION BOXES FOR INSTALLATION OF OWNER SUPPLIED I.T. EQUIPMENT INCLUDING POS/ ELECTRONIC CASH CONTROL SYSTEM. ELECTRICAL DIVISION TO VERIFY INSTALLATION IN ACCORDANCE WITH OWNER'S REQUIREMENTS AND MANUFACTURER'S INSTRUCTIONS.
12. ELECTRICAL DIVISION SHALL FURNISH AND INSTALL DISCONNECTS FOR ALL ELECTRICAL EQUIPMENT UNDER HOOD ACTIVATED BY FIRE SUPPRESSION SYSTEM.

ELECTRICAL LEGEND

- ELECTRICAL OUTLET
- J JUNCTION BOX
- CONVENIENCE DUPLEX RECEPTACLE
- (F) FLEX CONNECTION (CONTINUOUS WIRE FROM ROUGH-IN TO JUNCTION/OUTLET LOCATION)
- (D) DATA CONDUIT
- $ SWITCH
- ¢ CONTROLS
- STUB FROM FLOOR
- DROP FROM ABOVE
- DROP CORD FROM CEILING TO +72" A.F.F.
- FLOOR MOUNTED

NOTE: ELECTRICAL MOUNTING

ALL WALL MOUNT ELECTRICAL RECEPTACLE AND J-BOXES ARE TO BE FLUSH MOUNTED IN WALLS WITH NO EXPOSED CONDUIT SHOWING ON SURFACE OF WALLS. ARCHITECT TO PROVIDE MINIMUM WALL FURRING IF REQUIRED.

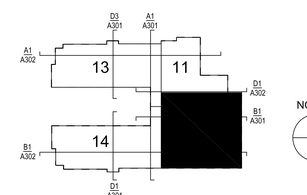
NOTE: POS ELECTRICAL

120V, 1 PHASE, SERVICE, 10.0 AMPS, STUB AS NOTED, FOR POS/PRE-CHECK SYSTEM STATIONS. (DEDICATED CIRCUIT, ISOLATED GROUND, PROVIDE (ADD PHONE LINE) EMPTY J-BOX WITH CONDUIT FOR INTERCONNECTING POS SYSTEM, PRE-CHECK AND PRINTERS) (VERIFY ALL REQUIRMENTS WITH POS SYSTEM SUPPLIER.)

NOTE: WALK-IN ELECTRICAL

ALL CONDUIT SHALL BE RUN ON THE EXTERIOR CEILING OF ALL COLD STORAGE ROOMS AND SHALL PENETRATE THE CEILING AT A POINT WHERE THE CONDUIT CAN DROP DIRECTLY TO THE POINT OF CONNECTION. UNDER NO CIRCUMSTANCES, WILL ELECTRICAL CONDUIT BE PERMITTED ON THE INTERIOR.

KEY PLAN - MAIN LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

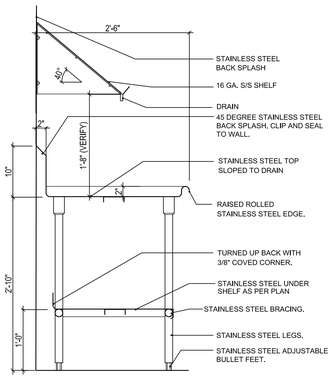
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

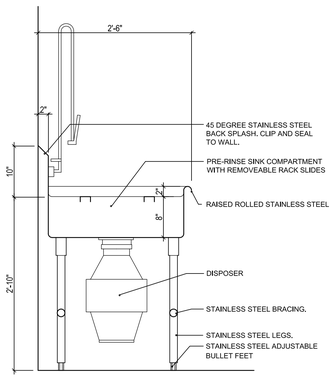
BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 12 FOOD SERVICE EQUIPMENT ELECTRICAL REQUIREMENT PLAN

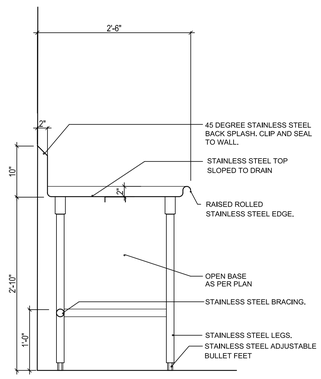
FS401



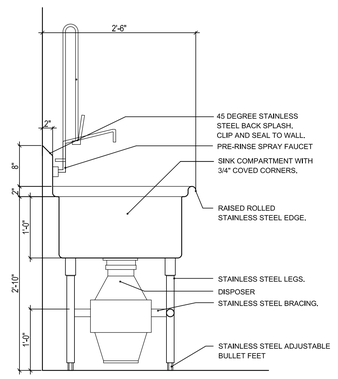
DISH TABLE, SHELF BASE
SECTION DETAIL — 3 / FS102
SCALE: 1" = 1'-0"



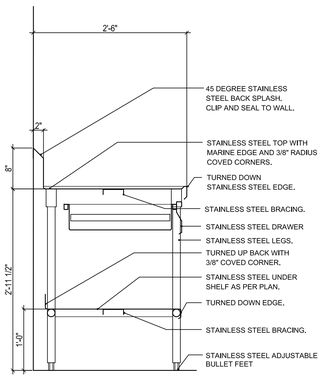
PRE-RINSE SINK
SECTION DETAIL — 4 / FS102
SCALE: 1" = 1'-0"



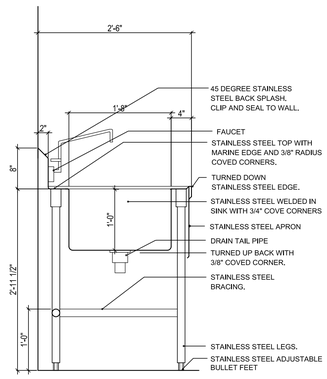
DISH TABLE OPEN BASE
SECTION DETAIL — 5 / FS102
SCALE: 1" = 1'-0"



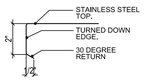
POT SINK
SECTION DETAIL — 6 / FS102
SCALE: 1" = 1'-0"

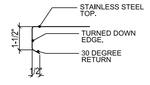


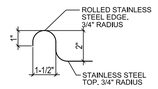
WORK TABLE/PREP SINK
SECTION DETAIL — 7 / FS102
SCALE: 1" = 1'-0"



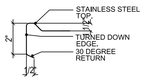
WORK TABLE/PREP SINK
SECTION DETAIL — 8 / FS102
SCALE: 1" = 1'-0"

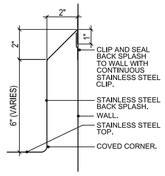


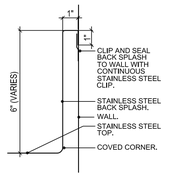




2" TURNED DOWN EDGE 1-1/2" TURNED DOWN EDGE RAISED ROLLED EDGE

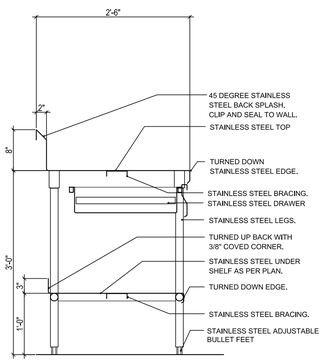




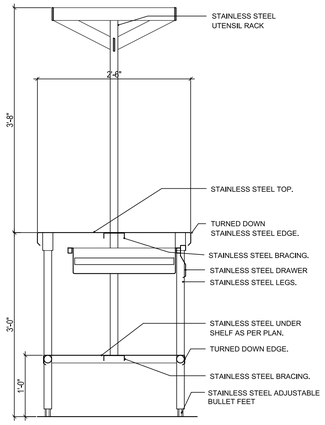


MARINE EDGE 45 DEGREE BACK SPLASH FLAT BACK/SIDE SPLASH

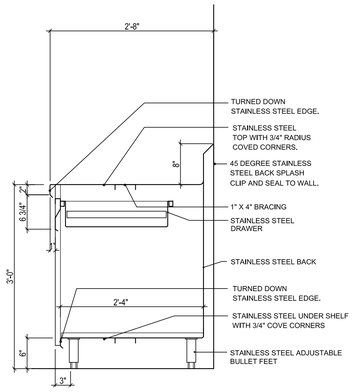
TYPICAL EDGE DETAILS
SECTION DETAIL — 18 / FS102
SCALE: 1" = 1'-0"



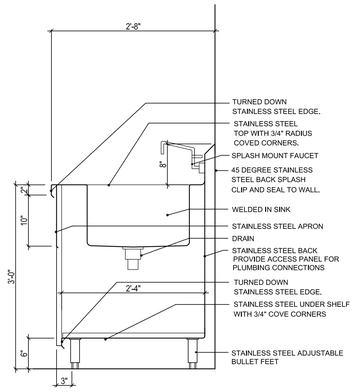
WORK TABLE, WALL
SECTION DETAIL — 9 / FS102
SCALE: 1" = 1'-0"



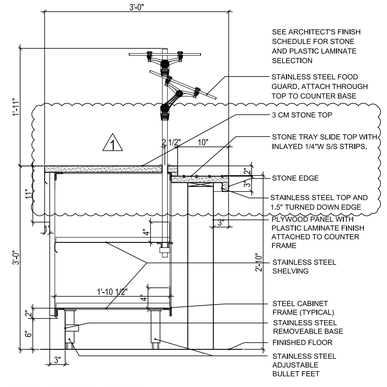
ISLAND WORK TABLE
SECTION DETAIL — 10 / FS102
SCALE: 1" = 1'-0"



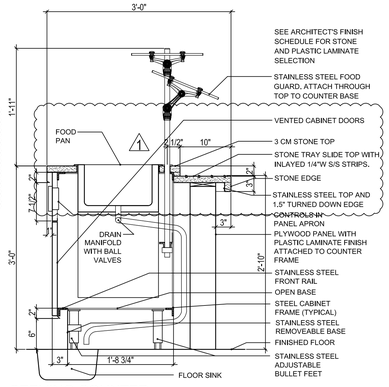
UTILITY COUNTER, FLAT TOP
SECTION DETAIL — 11 / FS102
SCALE: 1" = 1'-0"



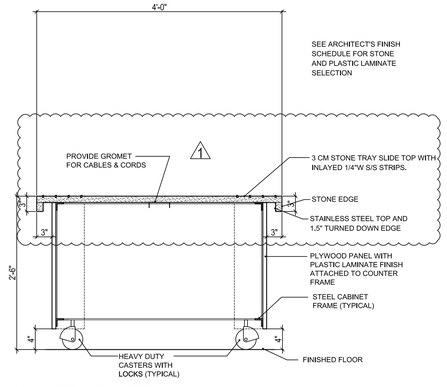
UTILITY COUNTER, SINK
SECTION DETAIL — 12 / FS102
SCALE: 1" = 1'-0"



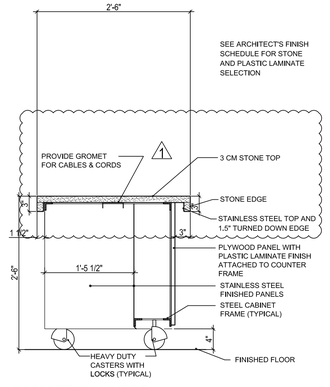
SERVING COUNTER
SECTION DETAIL — 13 / FS102
SCALE: 1" = 1'-0"



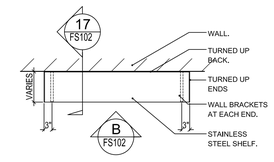
SERVING COUNTER
SECTION DETAIL — 14 / FS102
SCALE: 1" = 1'-0"



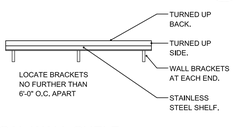
CASHIER COUNTER
SECTION DETAIL — 15 / FS102
SCALE: 1" = 1'-0"

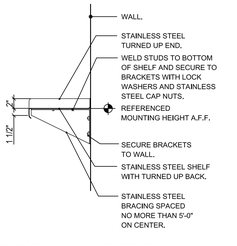


CASHIER COUNTER
SECTION DETAIL — 16 / FS102
SCALE: 1" = 1'-0"



TYPICAL WALL SHELF
PLAN DETAIL — A / FS102
SCALE: 1/2" = 1'-0"

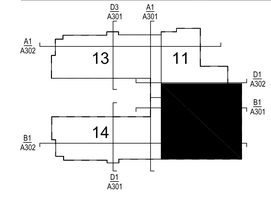




TYPICAL WALL SHELF
ELEVATION DETAIL — B / FS102
SCALE: 1/2" = 1'-0"

TYPICAL WALL SHELF
SECTION DETAIL — 17 / FS102
SCALE: 1" = 1'-0"

KEY PLAN - MAIN LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
1	11/17/23	ADDENDUM #1

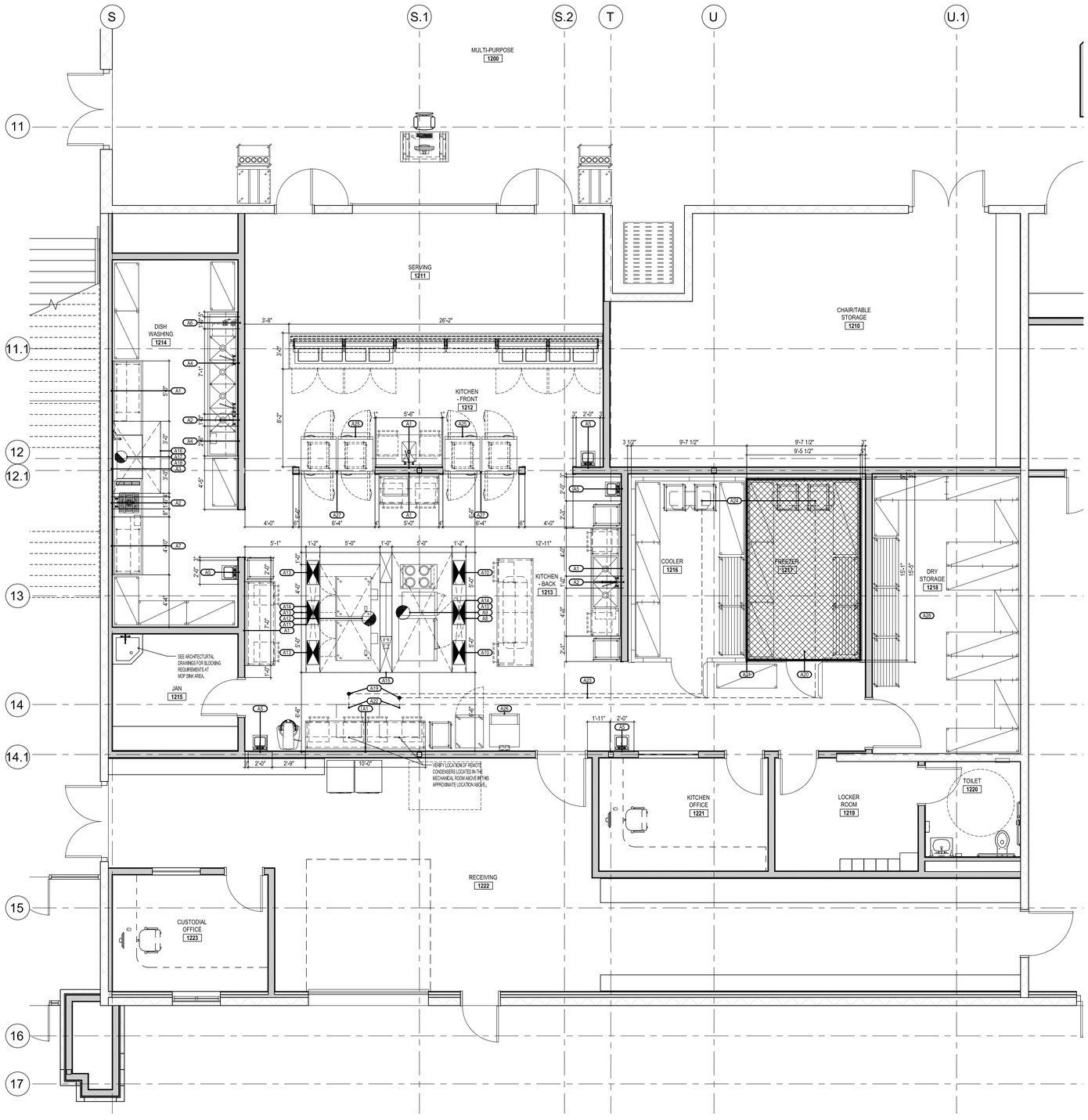
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 12 FOOD SERVICE EQUIPMENT CUSTOM EQUIPMENT DETAILS

FS102



FS1 FOOD SERVICE EQUIPMENT BUILDING REQUIREMENT PLAN - LEVEL 01

SCALE: 1/4" = 1'-0"

NORTH

BUILDING REQUIREMENTS GENERAL NOTES:

A. See Plumbing Rough-In Plan for requirements for drains, water, gas and refrigeration lines.

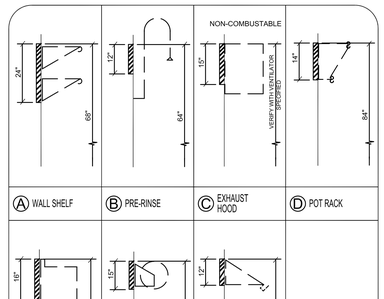
B. See Electrical Rough-In Plan for requirements for outlets, junction boxes, loads, voltages, and phases.

C. See Mechanical and Electrical Plans for requirements of ventillation systems.

D. Verify blocking requirements with suppliers for those items not provided by Kitchen Equipment Contractor.

E. All dimensions are to be field verified for compliance prior to fabrication/installation. All Dimensions shown are critical and are from finished wall.

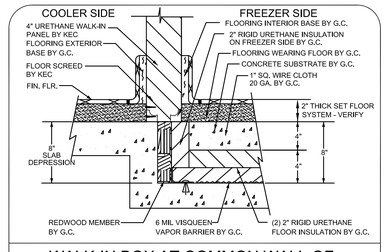
F. See Plumbing, Electrical and Mechanical Plans for further information and requirements.



Ⓐ WALL SHELF	Ⓑ PRE-RINSE	Ⓒ EXHAUST HOOD	Ⓓ POT RACK
Ⓔ HAND SINK	Ⓕ HOSE REEL	Ⓖ DISH RACK SHELF	

WALL BACKING DETAIL

NOTES: 1. ALL DIMENSIONS ARE TO FINISHED FLOOR. 2. ALL WALLBACKING TO BE 14GA STEEL PLATE SECURELY ATTACHED TO STUDS.



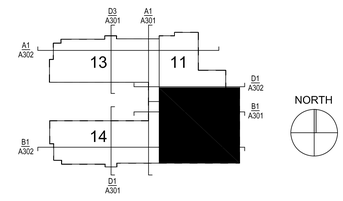
WALK-IN BOX AT COMMON WALL OF INSULATED THICK SET FLOOR

BUILDING REQUIREMENTS NOTE SCHEDULE:

A1	G.C. TO PROVIDE BLOCKING IN WALL FOR WALL SHELF. SEE DETAIL 'A'.
A2	G.C. TO PROVIDE BLOCKING IN WALL FOR PRE-RINSE FAUCET. SEE DETAIL 'B'.
A3	G.C. TO PROVIDE BLOCKING IN WALL FOR VENT HOOD. SEE DETAIL 'C'.
A4	G.C. TO PROVIDE BLOCKING IN WALL FOR POT RACK/WALL SHELF. SEE DETAIL 'D'.
A5	G.C. TO PROVIDE BLOCKING IN WALL FOR HAND SINK. SEE DETAIL 'E'.
A6	G.C. TO PROVIDE BLOCKING IN WALL FOR HOSE REEL. SEE DETAIL 'F'.
A7	G.C. TO PROVIDE BLOCKING IN WALL FOR DISH RACK SHELF. SEE DETAIL 'G'.
A8	ITEM #K-31 EXHAUST HOOD (STEAMER SIDE) BY K.E.C.. CANOPY BOX STYLE. TYPE I. MOUNT FROM STRUCTURE ABOVE AND TO UDS BEHIND. SEE HOOD SECTION DETAIL.
A9	MECHANICAL CONTRACTOR TO CONNECT EXHAUST SYSTEM TO EXHAUST DUCT COLLAR, (1) EACH 14"D REQUIRED AT 1800 CFM EACH AT 0.666 W.C. STATIC PRESSURE AND 1684 DUCT VELOCITY. FOR A TOTAL EXHAUST OF 1800 CFM.
A10	MECHANICAL CONTRACTOR TO CONNECT EXHAUST SYSTEM TO MAKE-UP AIR DUCT COLLAR, (3) EACH 12" X 24" REQUIRED AT 480 CFM EACH AT 0.128" W.C. STATIC PRESSURE, FOR A TOTAL SUPPLY OF 1440 CFM.
A11	ITEM #K-31 EXHAUST HOOD (OVEN SIDE) BY K.E.C., CANOPY BOX STYLE. TYPE I. MOUNT FROM STRUCTURE ABOVE AND TO UDS BEHIND. SEE HOOD SECTION DETAIL.
A12	MECHANICAL CONTRACTOR TO CONNECT EXHAUST SYSTEM TO EXHAUST DUCT COLLAR, (1) EACH 14"D REQUIRED AT 2250 CFM EACH AT 1.013" W.C. STATIC PRESSURE AND 2105 DUCT VELOCITY, FOR A TOTAL EXHAUST OF 2250 CFM.
A13	MECHANICAL CONTRACTOR TO CONNECT EXHAUST SYSTEM TO MAKE-UP AIR DUCT COLLAR, (3) EACH 12" X 24" REQUIRED AT 600 CFM EACH AT 0.162" W.C. STATIC PRESSURE, FOR A TOTAL SUPPLY OF 1800 CFM.
A14	G.C. TO PROVIDE NON COMBUSTIBLE CONSTRUCTION ASSEMBLIES WITHIN 18" OF EXHAUST HOOD.
A15	STAINLESS STEEL UTILITY DISTRIBUTION SYSTEM. ITEM #K33. CHASE BETWEEN END RISERS BETWEEN HOODS TO ABOVE CEILING. UTILITIES: GAS, ELECTRICAL AND WATER TO BE FED FROM ABOVE THROUGH RISERS. PROVIDED WITH HOOD ASSEMBLY WITH INTEGRATED CONTROLS TO OPERATE EXHAUST SYSTEM.
A16	ITEM #K-57 VAPOR EXHAUST VENT HOOD BY K.E.C.. CANOPY BOX STYLE. TYPE II ONE SECTION. MOUNT FROM STRUCTURE ABOVE AND TO BACK WALL.
A17	EXHAUST DUCT CONNECTION, (1) EACH 12" DIAMETER REQUIRED FOR A TOTAL EXHAUST OF 900 CFM AT 0.105 STATIC PRESSURE AND 1146 DUCT VELOCITY.
A18	MAKE-UP AIR AT 80% OF EXHAUSTED AIR OR A TOTAL OF 720 CFM. TO BE PROVIDED TO THE SPACE THROUGH A MAKE-UP SYSTEM PROVIDED BY THE MECHANICAL SYSTEM.
A19	G.C. TO PROVIDE CHASES THROUGH BUILDING AS REQUIRED FOR REFRIGERATION LINES FROM BLOWER COILS TO REMOTE REFRIGERATION UNIT IN MECHANICAL ROOM ABOVE. VERIFY LOCATION.
A20	G.C. TO PROVIDE INSULATED FLOOR SLAB SYSTEM AT WALK-IN FREEZER. SEE DETAILS AND MANUFACTURER'S SHOP DRAWINGS
A21	WALK-IN FREEZER/COOLER BOX SET ON SUB FLOOR BY K.E.C. WITH FINISHED FLOOR AND COVED BASE EXTENDING INTO UNITS BY G.C..
A22	REFRIGERATION LINE SET CONNECTION AT SYSTEM CONDENSERS, ITEMS #K-4A AND #K-5A, BY K.E.C.. TO BE LOCATED IN MECHANICAL ROOM ABOVE.
A23	REFRIGERATION LINE SETS BY K.E.C. FROM CONDENSERS IN MECHANICAL ROOM ABOVE TO EVAPORATOR COILS IN WALK-IN BOXES.
A24	REFRIGERATION LINE SET CONNECTIONS AT SYSTEM EVAPORATOR COILS, ITEMS #K-4B AND #K-5B, BY K.E.C.. TO BE LOCATED IN WALK-IN BOXES.
A25	MECHANICAL SYSTEM TO PROVIDE VENTILATION AT ROLL-THROUGH REFRIGERATOR TO EXHAUST 5.0 MBTU PER HOUR.
A26	MECHANICAL SYSTEM TO PROVIDE VENTILATION AT ICE MAKER TO EXHAUST 13.5 MBTU PER HOUR.
A27	VERIFY OPENING IN WALL TO FIT ROLL-THROUGH REFRIGERATOR AND ROLL-THROUGH FOOD WARMING CABINET.
A28	MECHANICAL SYSTEM TO PROVIDE MAXIMUM 70 DEGREE F. IN DRY STORAGE ROOM.

G.C. - GENERAL CONTRACTOR
K.E.C. - KITCHEN EQUIPMENT CONTRACTOR

KEY PLAN - MAIN LEVEL



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OGDEN SCHOOL DISTRICT

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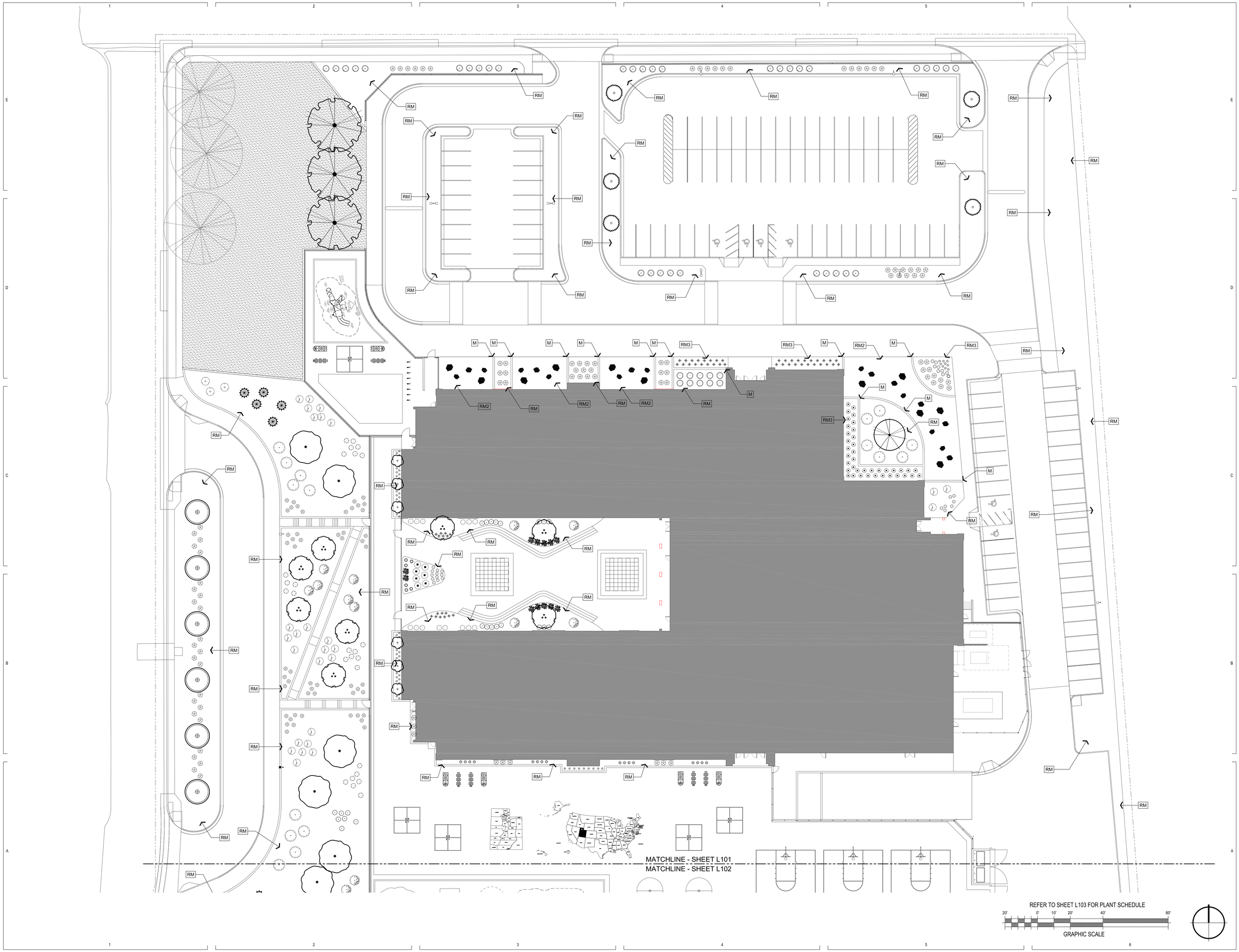
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AREA 12 FOOD SERVICE EQUIPMENT BUILDING REQUIREMENT PLAN

FS201



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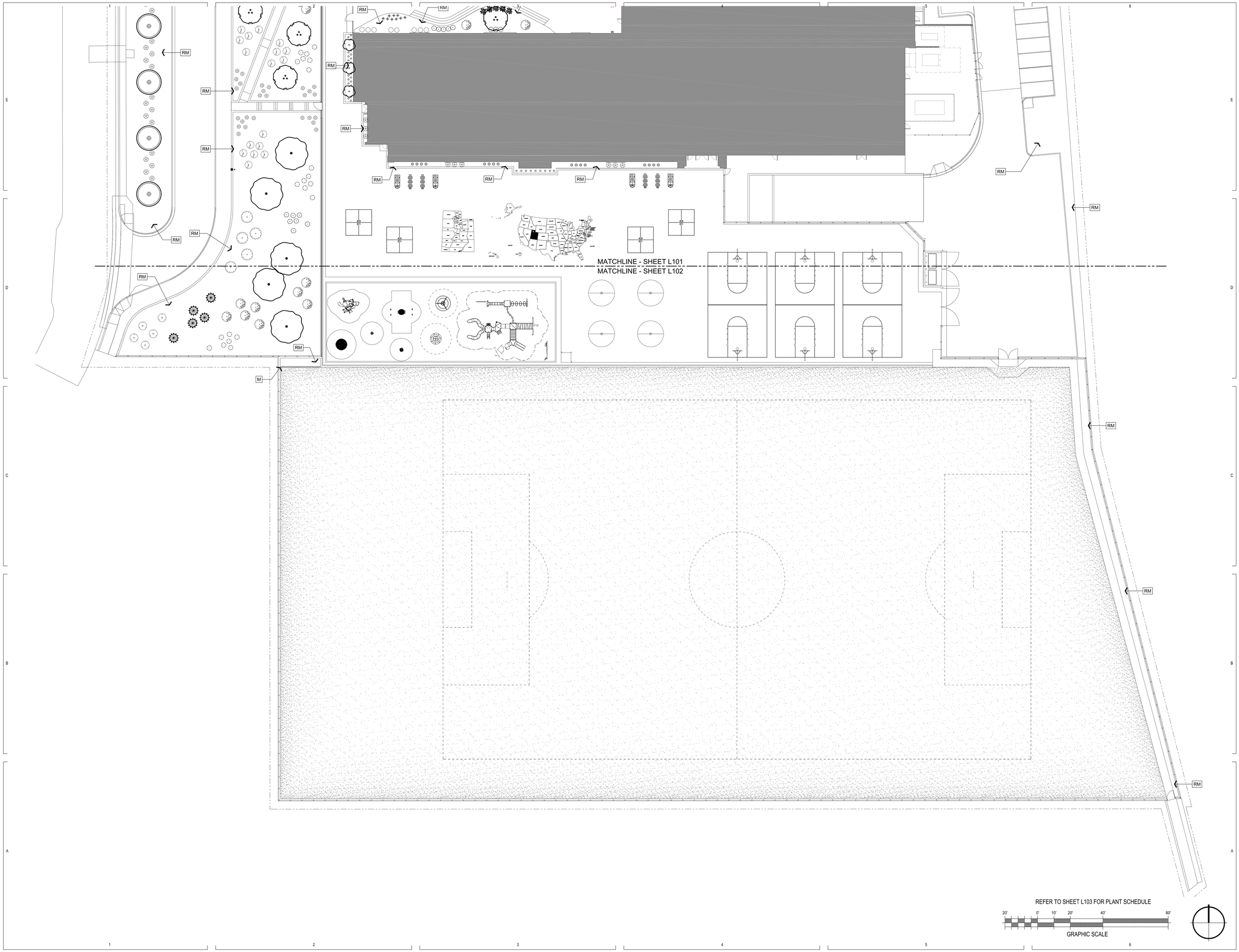
130 N. ECCLES AVE., OGDEN, UT 84404

CONSTRUCTION PACKAGE

PLANTING PLAN

L101



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130 N. ECCLES AVE., OGDEN, UT 84404

CONSTRUCTION PACKAGE

PLANTING PLAN

L102

SCHEDULE NOTE - QUANTITIES ARE PROVIDED FOR CONTRACTOR'S CONVENIENCE ONLY. CONTRACTOR IS TO VERIFY ALL QUANTITIES. CONTRACTOR SHALL ALSO VERIFY THAT ALL SHRUBS SHOWN ON THE PLANS ARE SHOWN ON THE SCHEDULE AND SHALL REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT BEFORE BIDDING.

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
	7	Acer ginnala `Flame`	Flame Amur Maple	25 gal.	Container	
	3	Acer miyabei `State Street`	Miyabei Maple	2" Cal.	B&B	
	1	Chionanthus retusus	Chinese Fringetree	2.5" Cal.	B&B	
	6	Malus x `JFS KW214MX` TM	Ivory Spear Crabapple	2" Cal.	B&B	
	5	Pyrus calleryana 'NCPX'1 PP26539 Javelin	Javelin Callery Pear	20 Gal.	Container	
	8	Syringa reticulata `Ivory Silk`	Ivory Silk Japanese Tree Lilac	2" Cal.	B&B	
	6	Zelkova serrata `Musashino`	Sawleaf Zelkova	2" Cal.	B&B	
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
	10	Juniperus scopulorum `Wichita Blue`	Wichita Blue Juniper	20 Gal.	Container	
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
	27	Arctostaphylos x coloradoensis `Panchito	Panchito Manzanita	5 gal.	Container	
	15	Aronia melanocarpa Uconnam012	PPAF Groundhug Spreading Chokecherry	5 gal.	Container	
	10	Berberis thunbergii 'Golden Devine'	Golden Devine Japanese Barberry	5 gal.	Container	
	16	Buxus microphylla `Bulthouse` TM	Sprinter Boxwood	5 gal.	Container	
	12	Paeonia suffruticosa `Lavender`	Lavender Tree Peony	5 gal.	Container	
	16	Philadelphus coronarius `SMNPVG` TM	Illuminati Tower Mockorange	5 gal.	Container	
	8	Prunus besseyi `Pawnee Buttes`	Sand Cherry	5 gal.	Container	
	16	Rhus aromatica `Gro-Low`	Gro-Low Fragrant Sumac	5 gal.	Container	
	7	Spiraea x bumalda `Crispa`	Crisp Leaf Spirea	5 gal.	Container	
	18	Symphoricarpos x chenaultii `Hancock`	Hancock Coralberry	2 gal.	Container	
	7	Syringa x `SMNSDTP` TM	Baby Kim Dwarf Lilac	5 gal.	Container	
	10	Taxus x media `Ershzam` TM	Erie Shores Anglo-Japanese Yew	5 gal.	Container	
	33	Viburnum opulus `Nanum`	Dwarf European Viburnum	5 gal.	Container	
ANNUALS/PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
	52	Achillea x `Moonshine`	Moonshine Yarrow	1 gal.	Container	
	54	Hemerocallis x `Little Jazz`	Red Daylily	1 gal.	Container	
	58	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily	1 gal.	Container	
	19	Sedum spectabile `Autumn Fire`	Showy Stonecrop	1 gal.	Container	
GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	
	97	Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass	1 gal.	Container	
	39	Chasmanthium latifolium	Northern Sea Oats	1 gal.	Container	
	35	Pennisetum alopecuroides `Desert Plains`	Desert Plains Fountian Grass	1 gal.	Container	
	6	Pennisetum alopecuroides `Praline	Praline Fountain Grass	1 gal.	Container	
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING
	152,096 sf	LAWN - Kentucky Blue Grass Sod	SOD - See Specifications	Sod		

MISC		
M		4"X12" Cast-in-place Concrete Mowstrip
RM		Install 8" depth 6" - 8" washed Crushed Southtown (Utah Landscaping Rock). Install over DeWitt Pro-5 Weed Barrier.
RM2		Install 8" depth 6" - 8" washed Crushed Wasatch Gray (Staker Parson). Install over DeWitt Pro-5 Weed Barrier.
RM3		Install 8" depth 6" - 8" washed Crushed Desert Pearl (Oak Creek Rock Products). Install over DeWitt Pro-5 Weed Barrier.
		2'-6" to 5' SANDSTONE COLORED boulders from Brown's Canyon Quarry. Submit Sample To Landscape Architect For Approval. 20% 2'-6" Boulders 30% 3' Boulders 30% 3'-6" Boulders 10% 4' Boulders 10% 5' Boulders Percentages are by quantity not weight
NOTES:		1. See details and specifications for additional information.

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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CONSTRUCTION PACKAGE

PLANTING PLAN

L103

3 1½" 25.6
4 2" 54.4
2 1" DRIP
1 1" DRIP
TREES 5 1" DRIP
SHRUBS 6 1" DRIP
7 1" DRIP SHRUBS
8 1" DRIP TREES
A Locate controller in NE corner of the outdoor storage room - Controler to be hard-wired to electrical
MATCHLINE - SHEET L201
MATCHLINE - SHEET L202
REFER TO SHEET L203 FOR IRRIGATION LEGEND
20' 0' 10' 20' 40' 80'
GRAPHIC SCALE

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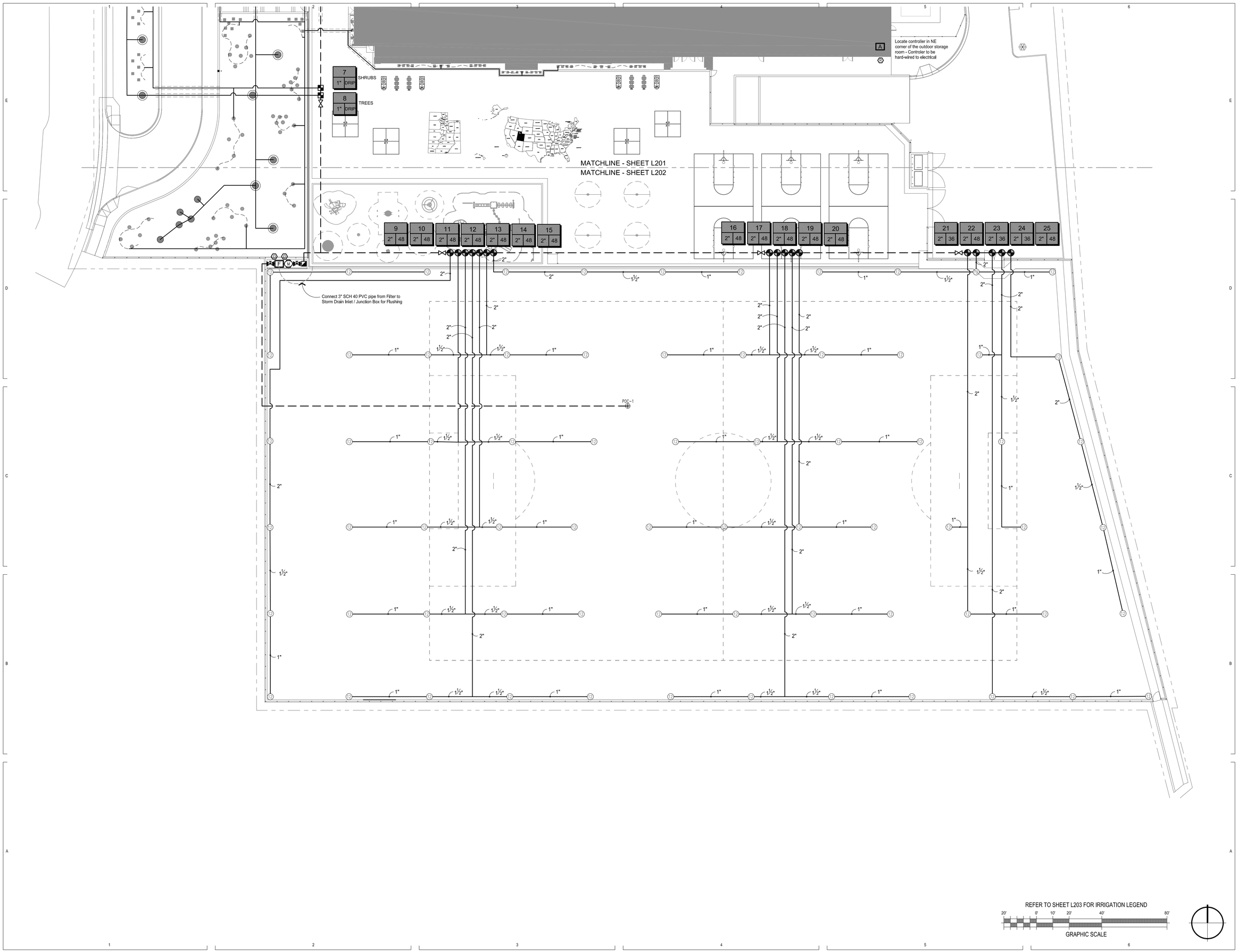
CONSTRCTUION PACKAGE

IRRIGATION PLAN

L201



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130 N. ECCLES AVE., OGDEN, UT 84404

CONSTRUCTION PACKAGE

IRRIGATION PLAN

L202

IRRIGATION_SCHEDULE

SYMBOL	CONTROLLERS	SIZE
A	Smart Rain Original Gen 4 Traditional Wire Controller	48 Zones
W	Rain Sensor - Rain Bird WR2-RFC	
	Grounding Rod - 5/8" X 8'	

SYMBOL	FILTER	SIZE
F	Amiad Mini-Sigma Filter w/ 80 micron screen w/ Strong Box Aluminum Enclosure & Insulated Blanket - Size to Fit	3"

SYMBOL	EQUIPMENT	SIZE
	Conbraco Weld Top Valve Model 78-154-01	3/4"
	Leemco Angle Valve - LV212 with Lateral Tee to match Mainline size	3"
	Leemco Self-restrained Gate Valve (LMV Series)	3"
M	Netafim Hydrometer - Model LHM3ERG0.1-MEL 10 Pulses per Gallon	3"
	Rain Bird PESB Control Valve	(See Valve ID Tag)
	Rain Bird 100-PESB Valve with PRB-QKCHK-100 Basket Filter	1"
	Rain Bird 33DRC 3/4" Quick Coupler Valve, two piece body	3/4"

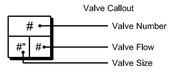
SYMBOL	MANUFACTURER/MODEL	RADIUS
3.0	Rain Bird 5006-PL-PC-SAM-R-SS 3.0	35'
12	Rain Bird 8005-SS 12	50'

SYMBOL	IRRIGATION DRIP
	Rain Bird XB-20PC Emitter
	PC-05 Emitter with Diffuser Cap
	PC-07 Emitter with Diffuser Cap
	Rain Bird XT-700 Drip Tubing
	Netafim Tree Ring - Double (New Trees) TLCVX-18 360 Degrees (See Details)
	Netafim Tree Ring - Single (New Trees) TLCVX-18 360 Degrees (See Details)

SYMBOL	IRRIGATION PIPE	SIZE
	Irrigation Lateral Line: PVC Schedule 40	1" - 2"
	Irrigation Mainline: PVC Schedule 40	3"
	Pipe Sleeve	See Specs

SYMBOL	POINT OF CONNECTION	SIZE
POC-1	Culinary POC Min. 110 GPM @ 95 PSI Static Notify Landscape Architect if Pressure is less than 95 psi static	3"

Valve Callout



NOTE:
1. Location of POC, Mainline, and Valves are diagrammatic. Contractor to locate in landscape areas wherever feasible.
2. Contractor to install Communication wires from Hydrometer to Controller in 1" grey PVC conduit to controller.

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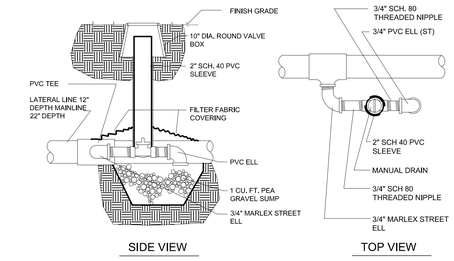
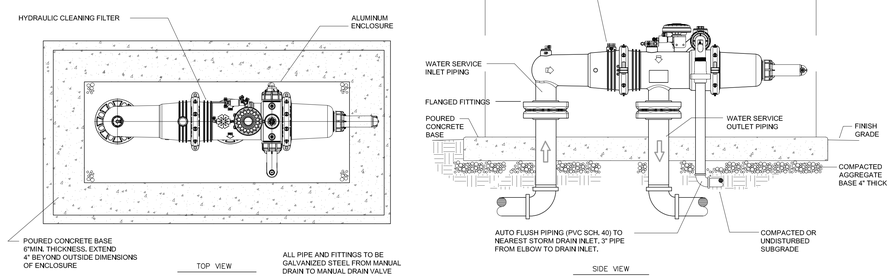
CONSTRUCTION PACKAGE

IRRIGATION PLAN

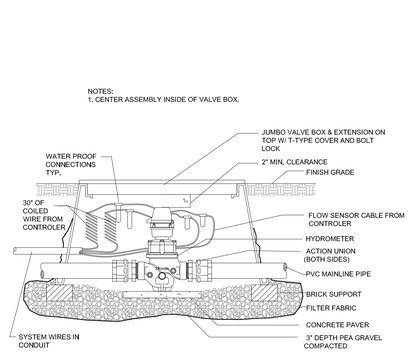
L203



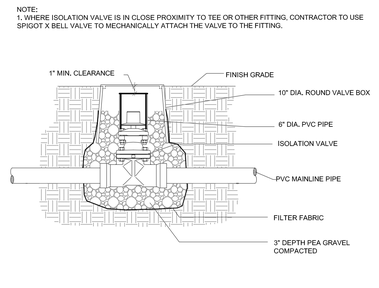
A Manual Drain Valve
NO SCALE



B Filter Assembly - Automatic
NO SCALE



C Hydrometer
NO SCALE



D Gate Valve for Isolation
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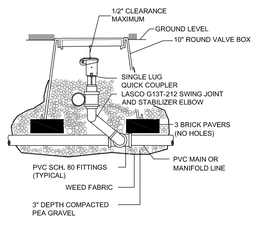
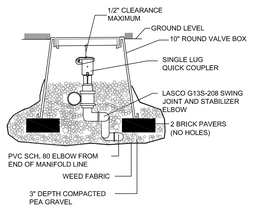
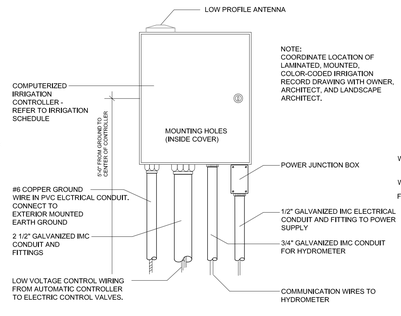


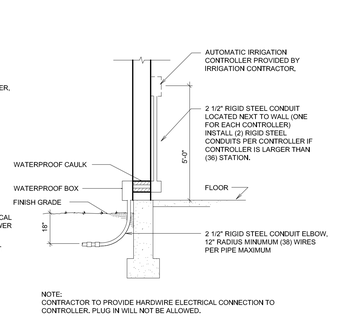
E Quick Coupler - Non Manifold
NO SCALE



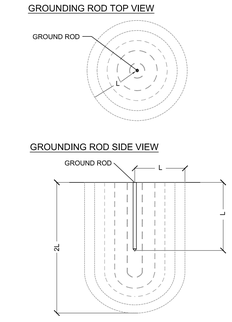
F Quick Coupler - Manifold)
NO SCALE



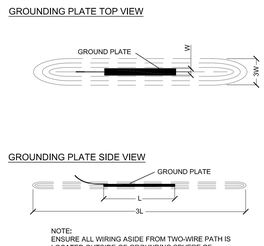
G Irrigation Controller
NO SCALE

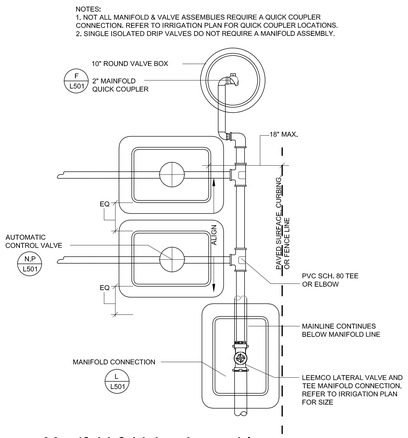


H Interior Wall Mounted Controller
NO SCALE

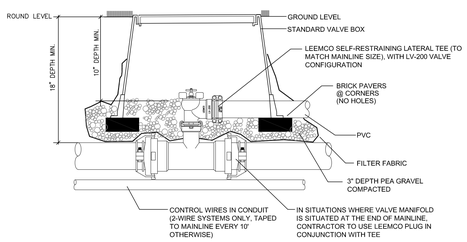


J Grounding Sphere of Influence
NO SCALE

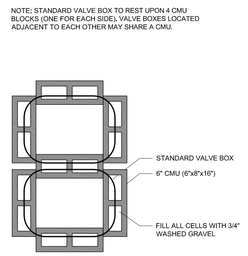




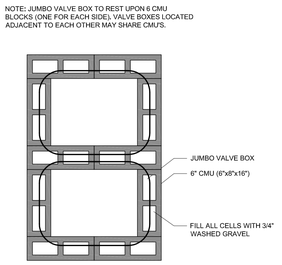
K Manifold & Valve Assembly
NO SCALE

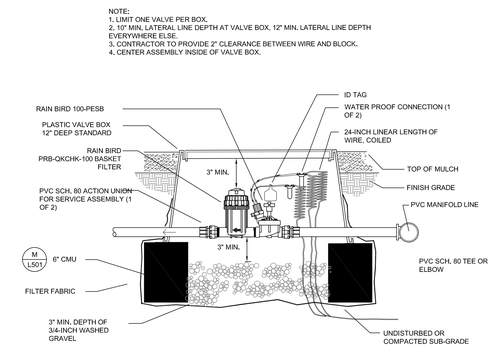


L Manifold Connection
NO SCALE

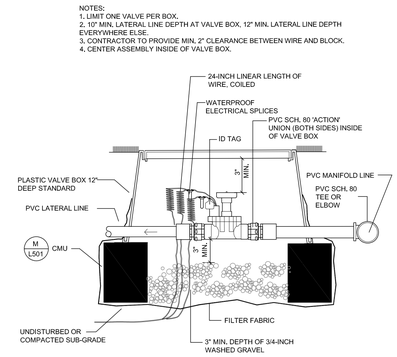


M CMU Placement
NO SCALE





N Drip Valve Assembly
NO SCALE



P Valve Assembly
NO SCALE

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STATE OF UTAH
Eric A. Lyman
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LICENSED LANDSCAPE ARCHITECT
11/08/2023

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REV	DATE	DESCRIPTION

VCBO NUMBER: 22785
CLIENT NUMBER: 00000
DATE: 2023 NOV 08

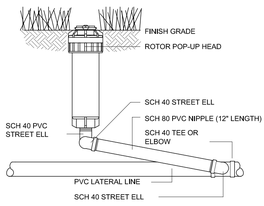
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CONSTRUCTION PACKAGE

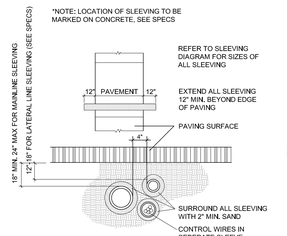
IRRIGATION DETAILS

L501

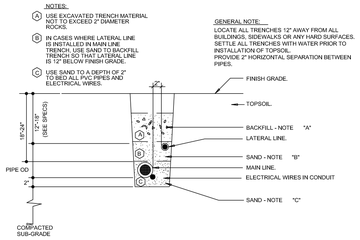


NOTE: ALL FITTINGS AND NIPPLE SIZES OF SWING JOINT COMPONENTS TO MATCH HEAD INLET SIZE. RAINBIRD OR LASCO PRE-ASSEMBLED SWING JOINTS MAY BE USED IN LIEU OF DETAILED ASSEMBLY.

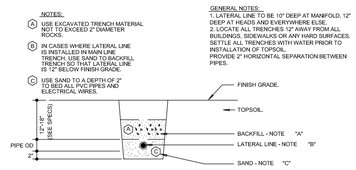
A Pop-Up Rotor Detail - 3/4" - 1" Inlet
NO SCALE



B Typical Sleeving Detail
NO SCALE



Main Line Trenching Detail



Lateral Line Trenching Detail

C Trenching Detail
NO SCALE

USE JOINT RESTRAINT CHART FOR ALL APPLICATIONS REQUIRING DUCTILE IRON FITTINGS. REFER TO SPECS.

DISTANCE CHART

REFER TO THE FOLLOWING TABLE THAT LISTS THE LENGTH (IN FEET) FOR EACH SIZE/TYPE FITTING WITHIN WHICH ALL JOINTS JUST BE RESTRAINED. ALL FITTINGS AND JOINT RESTRAINTS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS & SPECIFICATIONS.

AS AN EXAMPLE, IF YOU ARE INSTALLING A 3" MAINLINE WITH A DIRECTIONAL CHANGE OF 90°, REFER TO CHART UNDER PIPE SIZE TO 3" AND UNDER BENDS 90 YOU WILL SEE THE DISTANCE OF 11'. IF THERE IS ANY JOINT (VALVE, BELL, ETC.) YOU MUST INSTALL A JOINT RESTRAINT WITHIN 11' OF THE 90° MAINLINE DIRECTIONAL CHANGE.

PIPE SIZE	BENDS				REDUCERS			DEAD END	
	11°	22° 45°	90°		1 STEP	2 STEP 3 STEP		BLIND	SERV. B.
3"	2'	3'	6'	11'	8'	10'	-	30'	15'
4"	2'	4'	9'	20'	14'	20'	31'	45'	25'
6"	3'	6'	13'	29'	30'	40'	53'	63'	40'
8"	4'	8'	15'	38'	33'	55'	63'	75'	70'
10"	5'	9'	19'	45'	36'	56'	75'	98'	90'
12"	5'	10'	21'	53'	38'	60'	83'	112'	110'

D Joint Restraint Chart
NO SCALE

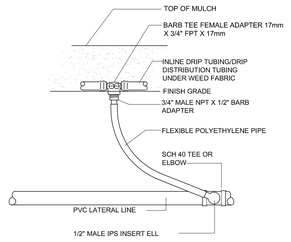
INSTALLATION CHART

REFER TO THE FOLLOWING TABLE WHICH LISTS THE NUMBER OF BOLTS, SIZE, AND TORQUE FOR EACH BOLT IN REFERENCE TO THE SIZE OF PIPE WHICH IS BEING RESTRAINED.

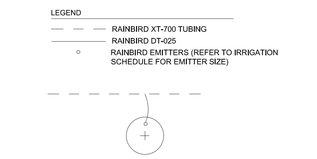
AS AN EXAMPLE, IF YOU HAVE A 3" PIPE, YOU WILL NEED 2 BOLTS THAT ARE 3/8 X 2.5" AND TIGHTEN THEM WITH A TORQUE WRENCH TO 20 FT-LBS.

PIPE SIZE	NO. BOLTS	BOLT SIZE	TORQUE FT-LBS.
3"	2	3/8"x2.5"	20
4"	2	1/2"x3"	50
6"	2	1/2"x3.5"	50
8"	4	1/2"x4"	50
10"	4	5/8"x5.5"	100
12"	4	5/8"x5.5"	100

CONTACT TONY GARNER @ (208) 631-7787, THE LEEMCO REPRESENTATIVE, FOR ALL QUESTIONS CONCERNING LEEMCO PRODUCTS. COORDINATE AN INSTALLATION CLINIC WITH TONY GARNER PRIOR TO INSTALLING THE MAINLINE.

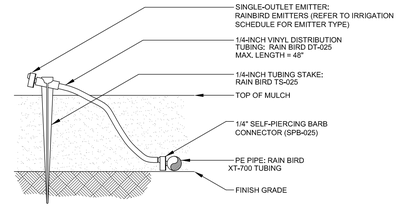


E PVC to PE Pipe Connection
NO SCALE



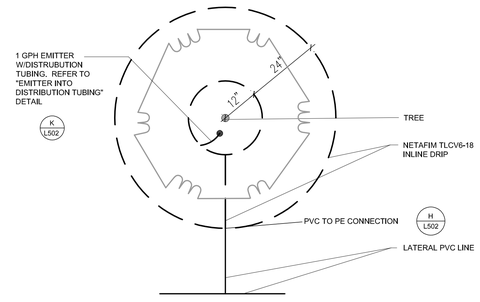
NOTE:
1. IF ON A SLOPE, LOCATE EMITTER UPHILL SIDE OF PLANT. IF NOT ON SLOPE, LOCATE EMITTER ON BUILDING OR FENCE SIDE OF PLANT.
2. EMITTER SHALL BE VISIBLE TO MAINTENANCE PERSONNEL.
3. EMITTER TO BE LOCATED 6" FROM BASE OF SHRUB AND 3" FROM BASE OF PERENNIAL.

F Shrub Drip - Plan View
NO SCALE



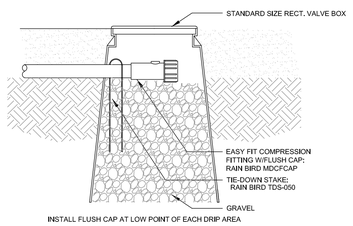
NOTE:
1. USE RAIN BIRD BUG GUN MODEL EMA-BG TO INSERT EMITTER DIRECTLY INTO XERI-TUBE TUBING.
2. INSTALL PE PIPE UNDER WEED BARRIER.
3. INSTALL PC DIFFUSER CAP WITH PC EMITTERS.

G Emitter into Distribution Tubing
NO SCALE



1. SET NETAFIM DRIP LINE ON TOP OF FINISH GRADE. STAPLE TO GROUND AND COVER WITH WEED BARRIER AND MULCH.
2. LOCATE INDICATOR EMITTER ON OUTSIDE OF OUTER DRIP RING ON EVERGREEN TREES ONLY.

H Tree Drip (New Tree) Plan View
NO SCALE



INSTALL FLUSH CAP AT LOW POINT OF EACH DRIP AREA

J Drip Flushing Cap
NO SCALE

VCBO ARCHITECTURE
524 SOUTH 600 EAST, SALT LAKE CITY, UT 84102
801.575.8900
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STATE OF UTAH — Eric A. Lyman — 88-103729 — 5301 — LICENSED LANDSCAPE ARCHITECT

11/08/2023

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OSD HILLCREST ELEMENTARY REBUILD

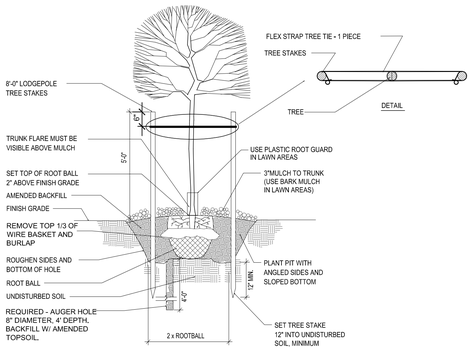
130 N. ECCLES AVE., OGDEN, UT 84404

CONSTRUCTION PACKAGE

IRRIGATION DETAILS

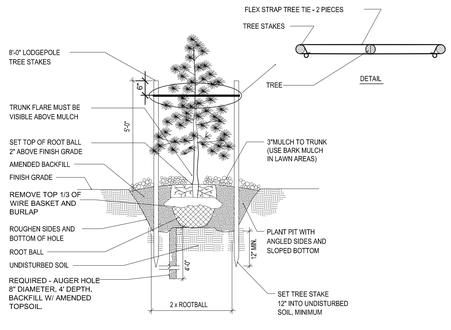
L502

NOTES:
1. INSTALL TREE IN HOLE, ADD 1ST LAYER OF COMPACTED SOIL MIX, CUT AND REMOVE ALL BURLAP, TWINE AND WIRE FROM TOP 1/3 OF BALL, ADD SECOND LAYER OF SOIL MIX.
2. SOIL MIX FOR ALL TREES SHALL BE 30% EXISTING SOIL EXCAVATED FROM PLANT HOLE, 30% LOAMY TOPSOIL, 20% CLEAN COARSE SAND, 20% PEAT MOSS
3. PLACE AGRIFORM TABLETS IN EACH PLANTING BIT, BURY AT 1/3 DEPTH OF ROOT BALL, PLACE 3 TABLETS IN EACH PIT, NO CLOSER THAN 18" APART
4. DIAMETER OF TREE RING IN LAWN AREAS IS TO BE 4'-0".

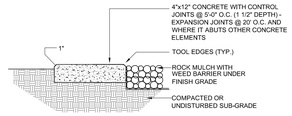


A Deciduous Tree Planting and Staking
NO SCALE

NOTES:
1. INSTALL TREE IN HOLE, ADD 1ST LAYER OF COMPACTED SOIL MIX, CUT AND REMOVE ALL BURLAP, TWINE AND WIRE FROM TOP 1/3 OF BALL, ADD SECOND LAYER OF SOIL MIX.
2. SOIL MIX FOR ALL TREES SHALL BE 30% EXISTING SOIL EXCAVATED FROM PLANT HOLE, 30% LOAMY TOPSOIL, 20% CLEAN COARSE SAND, 20% PEAT MOSS
3. PLACE AGRIFORM TABLETS IN EACH PLANTING BIT, BURY AT 1/3 DEPTH OF ROOT BALL. PLACE 3 TABLETS IN EACH PIT, NO CLOSER THAN 18" APART
4. DIAMETER OF TREE RING IN LAWN AREAS IS TO BE 2'-0" WIDER THAN DIAMETER OF CANOPY.

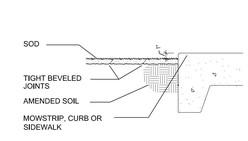


R Conifer Tree Planting and Staking
NO SCALE



NOTES:
1. MOWSTRIP TO BE CAST-IN-PLACE AND POURED USING TYPICAL WEIGHT STRUCTURAL CONCRETE.
2. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AROUND MOWSTRIPS-DO NOT CREATE A DAM EFFECT WITH PLACEMENT OF MOWSTRIP.
3. PRECISELY FOLLOW LAYOUT AS SHOWN ON PLANTING PLAN.
4. ALL CONTROL JOINTS AND EXPANSION JOINTS TO BE MADE PERPENDICULAR TO EDGE OF CONCRETE

B Concrete Mowstrip
NO SCALE



C Sod Installation
NO SCALE

SOIL MIX FOR ALL TREES, SHRUBS AND GROUND COVER SHALL BE 30% EXISTING SOIL EXCAVATED FROM PLANT HOLE, 30% LOAMY TOPSOIL, 20% CLEAN COARSE SAND, 20% PEAT MOSS

PLACE AGRIFORM TABS IN EACH PLANTING PIT, BURIED 1/3 DEPTH OF BALL. PLACE TABS AS FOLLOWS:
1 & #2 SIZE - 1 TAB
#5 SIZE - 2 TABS
1 1/2" CAL. & UP - 3 TABS
PLACE TABS NO CLOSER THAN 18" APART

2" DEEP MIN. WATER RETENTION BASIN
~~FINISH~~ GRADE
SOIL MIX
LIGHTLY COMPACTED SOIL MIX

TYPICAL SHRUB PLANTING DEPTH: DEPTH OF BALL + 2"
TYPICAL SHRUB PLANTING WIDTH: WIDTH OF BALL + 6"

D Shrub Planting Detail
NO SCALE

VCBO ARCHITECTURE
524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
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STATE OF UTAH
Eric A. Lyman
88-103729
5301
REGISTERED LANDSCAPE ARCHITECT

11/08/2023

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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

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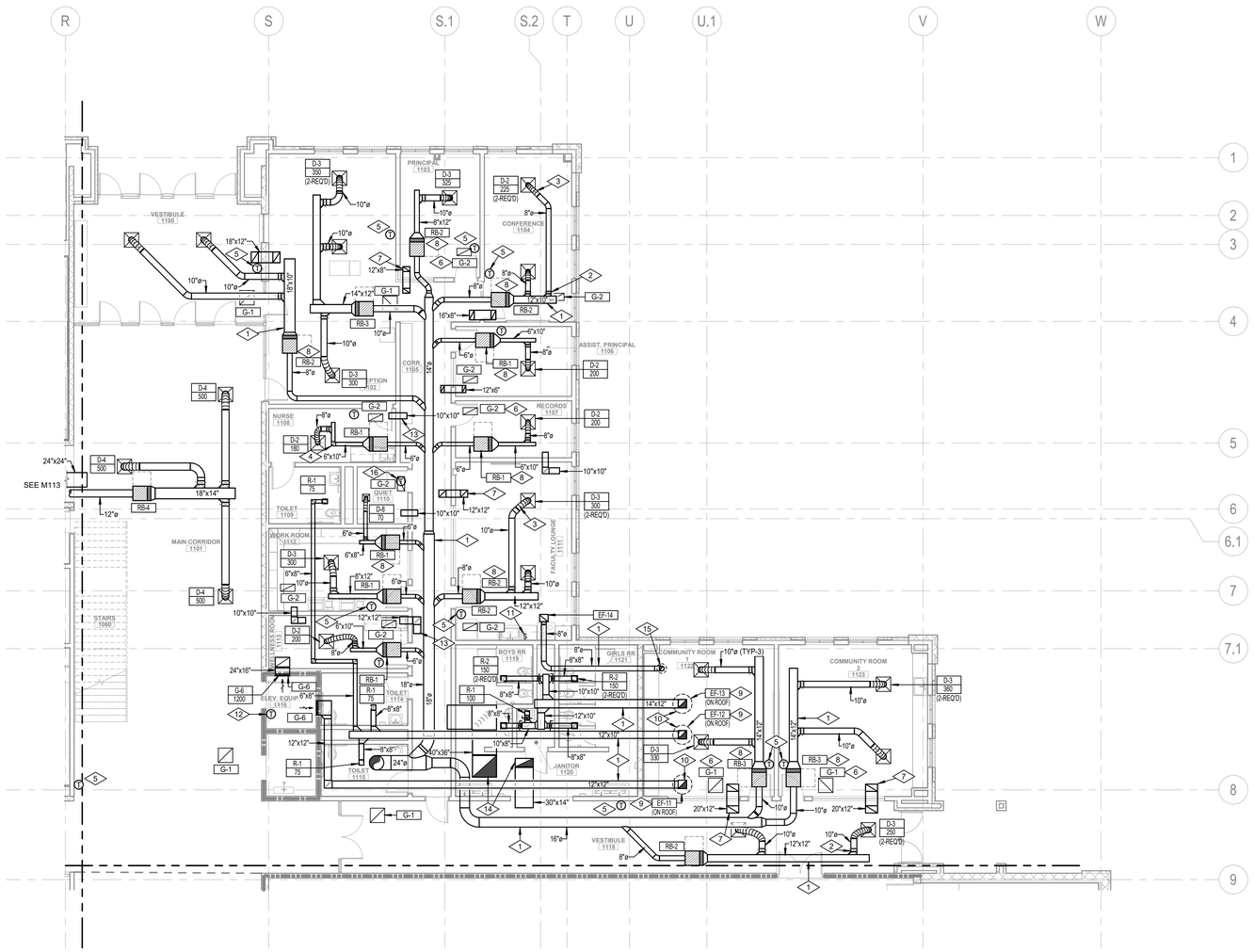
LANDSCAPE DETAILS

L503



MECHANICAL PLAN - LEVEL 01 - AREA 11

NORTH

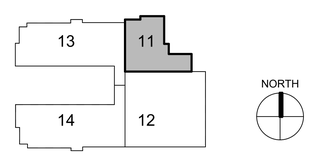
0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. HIGH EFFICIENCY TAKE-OFF FITTING WITH VOLUME CONTROL BALANCING DAMPER (TYPICAL).
3. FLEXIBLE DUCTWORK. MAXIMUM LENGTH 5'-0" (TYPICAL).
4. TURNING VANES (TYPICAL).
5. WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL).
6. PROVIDE DUCT BOARD SOUND BOOT AT RETURN AIR GRILLE (TYPICAL). SEE DETAIL 2/M606.
7. TRANSFER AIR DUCT ABOVE CEILING (TYPICAL). SEE DETAIL 11/M602.
8. VAV BOX WITH REHEAT COIL SHALL BE LOCATED CLEAR OF LIGHTS, PIPING AND ALL TRADES TO ALLOW FULL ACCESS TO BOX CONTROL PANEL AND HEATING VALVES, ETC. MINIMUM 24" CLEAR SERVICE AREA SHALL BE MAINTAINED (TYPICAL).
9. EXHAUST AIR DUCT RISE THRU ROOF. MAINTAIN A MINIMUM OF 15'-0" FROM ALL OUTSIDE AIR INTAKES.
10. DUCT THRU ROOF. COORDINATE WITH STRUCTURE.
11. WALL SWITCH WITH 0-2 HOUR TIMER & PILOT LIGHT TO CONTROL EXHAUST FAN.
12. WALL MOUNTED COOLING THERMOSTAT TO CONTROL OPERATION OF EXHAUST FAN "EF-13".
13. TRANSFER AIR DUCT ABOVE CEILING (TYP).
14. RETURN AIR DUCT UP TO FLOOR ABOVE. SEE SHEET M402 FOR CONTINUATION.
15. 8" DIA. EXHAUST AIR DUCT UP THRU ROOF. TERMINATE DUCT 24" ABOVE ROOF IN NON-BACKDRAFT TYPE VENT CAP. SEE DETAIL 12/M602.
16. LOCATE TEMPERATURE SENSOR IN RETURN AIR GRILLE LOCATED IN THE CEILING.

KEY PLAN - MAIN LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

LICENSED PROFESSIONAL ENGINEER #334524-2202 JAMES AUSTIN BERRETT 11/8/2023 UTAH

OLSEN & PETERSON
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Phone: (801) 486-6600 Fax: (801) 487-2021

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

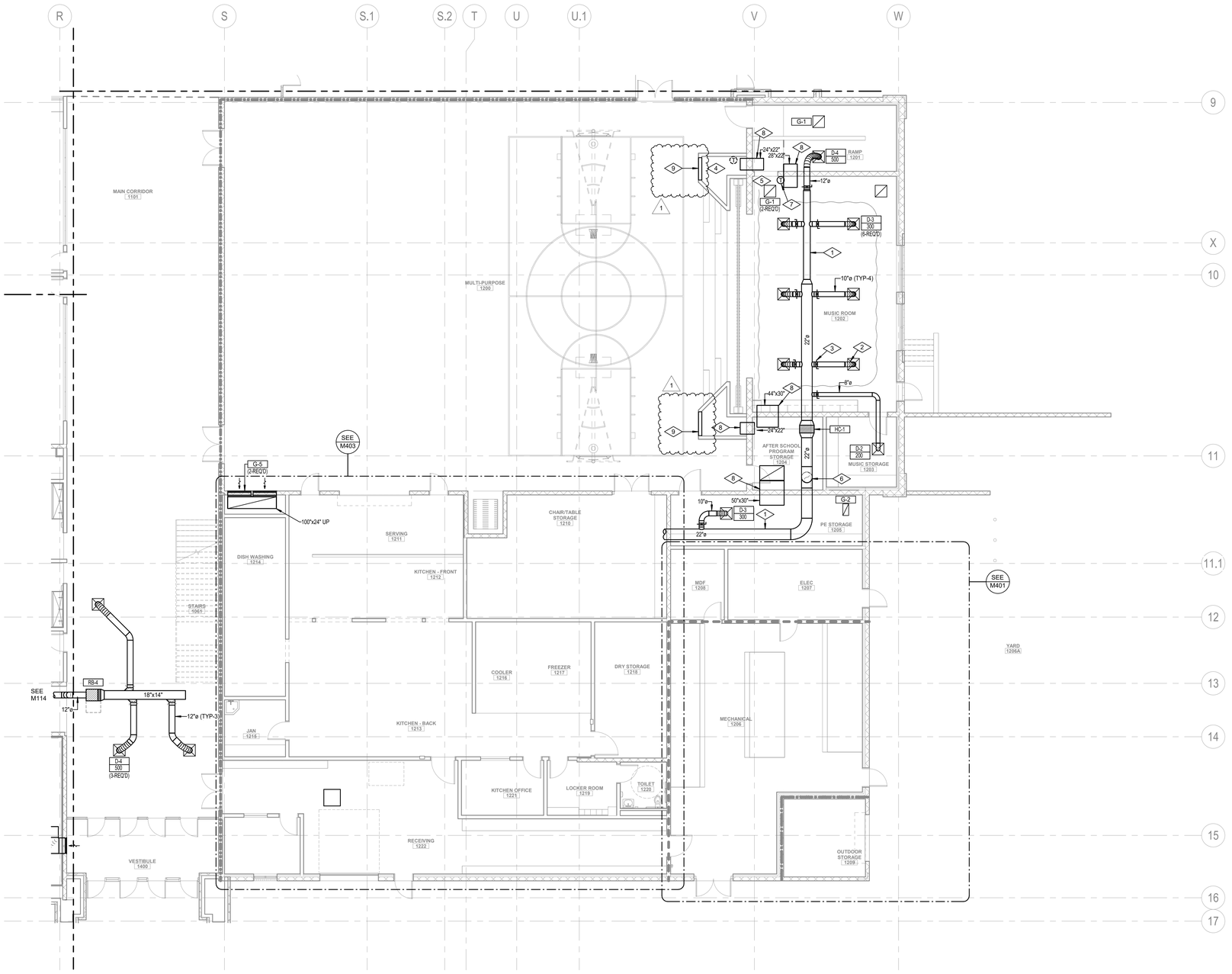
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PLAN - LEVEL 01 - AREA 11

M111

11/16/2023 2:12:07 PM



MECHANICAL PLAN - LEVEL 01 - AREA 12

NORTH

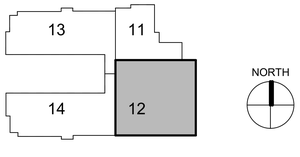
0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. FLEXIBLE DUCTWORK. MAXIMUM LENGTH 5'-0" (TYPICAL).
3. MANUAL VOLUME CONTROL BALANCING DAMPER (TYPICAL).
4. WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL).
5. PROVIDE DUCT BOARD SOUND BOOT AT RETURN AIR GRILLE (TYPICAL). SEE DETAIL 2/M606.
6. DUCT RISE/DROP ON 45 DEG. OR SHALLOWER.
7. WALL MOUNTED HEATING/COOLING THERMOSTAT TO TIE TO "HC-1"
8. TRANSFER AIR DUCT ABOVE CEILING (TYPICAL).
9. PROVIDE 48"X 48" OPENING IN SHEET ROCK WALL BEHIND PERFORATED ARCHITECTURAL PANEL. COORDINATE WITH ARCHITECTURAL PLANS

KEY PLAN - MAIN LEVEL



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DATE: NOVEMBER 08 2023

LICENSED PROFESSIONAL ENGINEER
#334524-2202
JAMES AUSTIN BERRETT
11/8/2023
UTAH

OLSEN & PETERSON
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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
1	11-21-22	Addendum 01

OSD HILLCREST ELEMENTARY REBUILD

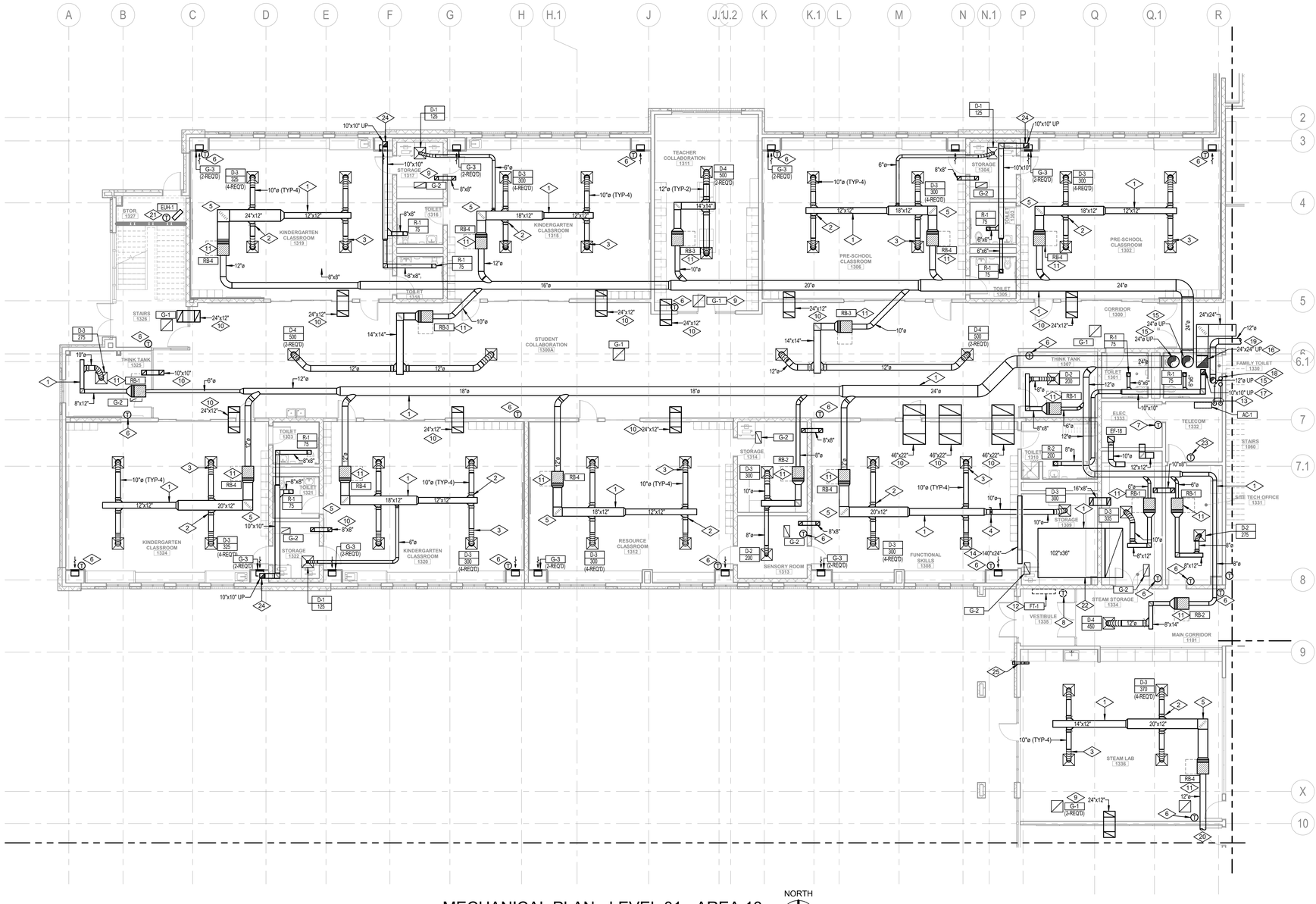
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PLAN - LEVEL 01 - AREA 12

M112

11/15/2023 2:47:54 PM



MECHANICAL PLAN - LEVEL 01 - AREA 13

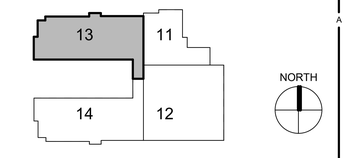
0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. HIGH EFFICIENCY TAKE-OFF FITTING WITH VOLUME CONTROL BALANCING DAMPER (TYPICAL).
3. FLEXIBLE DUCTWORK. MAXIMUM LENGTH 5'-0" (TYPICAL).
4. MANUAL VOLUME CONTROL BALANCING DAMPER (TYPICAL).
5. TURNING VANES (TYPICAL).
6. WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL).
7. WALL MOUNTED COOLING THERMOSTAT TO CONTROL OPERATION OF EXHAUST FAN (TYPICAL).
8. HEATING THERMOSTAT ABOVE CEILING TO CONTROL FINTUBE.
9. PROVIDE DUCT BOARD SOUND BOOT AT RETURN AIR GRILLE (TYPICAL). SEE DETAIL 2/M606.
10. TRANSFER AIR DUCT ABOVE CEILING (TYPICAL). SEE DETAIL 11/M602.
11. VAV BOX WITH REHEAT COIL SHALL BE LOCATED CLEAR OF LIGHTS, PIPING AND ALL TRADES TO ALLOW FULL ACCESS TO BOX CONTROL PANEL AND HEATING VALVES, ETC. MINIMUM 24" CLEAR SERVICE AREA SHALL BE MAINTAINED (TYPICAL).
12. BARE FINTUBE LOCATED ABOVE CEILING.
13. REFRIGERANT PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
14. PROVIDE OPENING IN WALL ABOVE CEILING.
15. SUPPLY AIR DUCT DOWN FROM ABOVE. SEE SHEET M402 FOR CONTINUATION. COORDINATE EXACT LOCATION WITH STRUCTURE & ARCHITECTURAL CHASE.
16. RETURN AIR DUCT UP TO ABOVE. SEE SHEET M402 FOR CONTINUATION. COORDINATE EXACT LOCATION WITH STRUCTURE & ARCHITECTURAL CHASE.
17. EXHAUST AIR DUCT UP TO ABOVE. SEE SHEET M402 FOR CONTINUATION. COORDINATE EXACT LOCATION WITH STRUCTURE & ARCHITECTURAL CHASE.
18. REFRIGERANT PIPING UP TO ABOVE. SEE SHEET M223 FOR CONTINUATION.
19. SEE SHEET M111 FOR CONTINUATION.
20. SEE SHEET M114 FOR CONTINUATION.
21. WALL MOUNTED HEATING THERMOSTAT.
22. PROVIDE K-27 INSULATED DUCTWORK WITH PERFORATED METAL LINER.
23. WALL MOUNTED, HARD WIRED COOLING THERMOSTAT TO CONTROL OPERATION OF AIR CONDITIONING UNIT "AC-1".
24. EXHAUST AIR DUCT UP TO ABOVE. SEE SHEET M223 FOR CONTINUATION. COORDINATE EXACT LOCATION WITH STRUCTURE & ARCHITECTURAL CHASE.
25. RUN EXHAUST DUCT DOWN AS FAR AS NEED FOR FLEXIBLE CONNECTION FROM 3D PRINTER. PROVIDE CLEANOUT BELOW FLEX CONNECTION. CLEANOUT TO BE A MIN. OF 18 INCHES ABOUT FINISH FLOOR. CONTRACTOR TO COORDINATE WITH OWNER. TERMINATE EXHAUST DUCT HIGH AS POSSIBLE OUTSIDE OF BUILDING WITH DRYER DUCT TERMINATION KIT.

KEY PLAN - MAIN LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

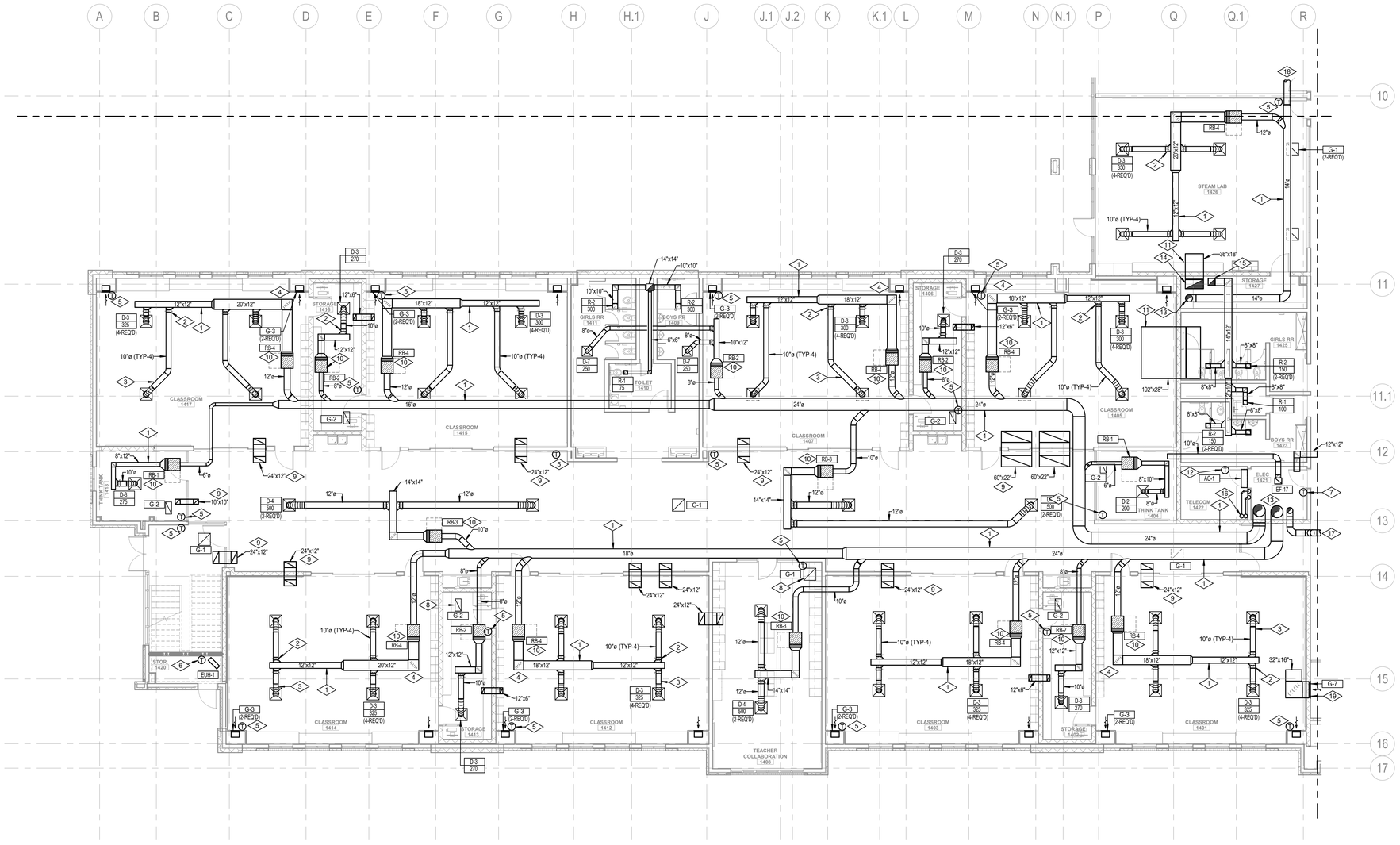
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PLAN - LEVEL 01 - AREA 13

M113

11/15/2023 2:48:01 PM



MECHANICAL PLAN - LEVEL 01 - AREA 14

NORTH

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. HIGH EFFICIENCY TAKE-OFF FITTING WITH VOLUME CONTROL BALANCING DAMPER (TYPICAL).
3. FLEXIBLE DUCTWORK. MAXIMUM LENGTH 5'-0" (TYPICAL).
4. TURNING VANES (TYPICAL).
5. WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL).
6. WALL MOUNTED HEATING THERMOSTAT (TYPICAL).
7. WALL MOUNTED COOLING THERMOSTAT TO CONTROL OPERATION OF EXHAUST FAN (TYPICAL).
8. PROVIDE DUCT BOARD SOUND BOOT AT RETURN AIR GRILLE (TYPICAL). SEE DETAIL 2/M606.
9. TRANSFER AIR DUCT ABOVE CEILING (TYPICAL). SEE DETAIL 11/M602.
10. VAV BOX WITH REHEAT COIL SHALL BE LOCATED CLEAR OF LIGHTS, PIPING AND ALL TRADES TO ALLOW FULL ACCESS TO BOX CONTROL PANEL AND HEATING VALVES, ETC. MINIMUM 24" CLEAR SERVICE AREA SHALL BE MAINTAINED (TYPICAL).
11. PROVIDE K-27 INSULATED DUCTWORK WITH PERFORATED METAL LINER.
12. WALL MOUNTED, HARD WIRED COOLING THERMOSTAT TO CONTROL OPERATION OF AIR CONDITIONING UNIT "AC-1".
13. SUPPLY AIR DUCT DOWN FROM ABOVE. SEE SHEET M402 FOR CONTINUATION. COORDINATE EXACT LOCATION WITH STRUCTURE & ARCHITECTURAL CHASE.
14. RETURN AIR DUCT UP TO ABOVE. SEE SHEET M402 FOR CONTINUATION. COORDINATE EXACT LOCATION WITH STRUCTURE & ARCHITECTURAL CHASE.
15. EXHAUST AIR DUCT UP TO ABOVE. SEE SHEET M402 FOR CONTINUATION. COORDINATE EXACT LOCATION WITH STRUCTURE & ARCHITECTURAL CHASE.
16. REFRIGERANT PIPING UP TO ABOVE. SEE SHEET M224 FOR CONTINUATION.
17. SEE SHEET M112 FOR CONTINUATION.
18. SEE SHEET M113 FOR CONTINUATION.
19. INSTALL RETURN AIR GRILLE ABOVE CEILING IN ADJACENT CLASSROOM.

KEY PLAN - MAIN LEVEL

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OSD HILLCREST ELEMENTARY REBUILD

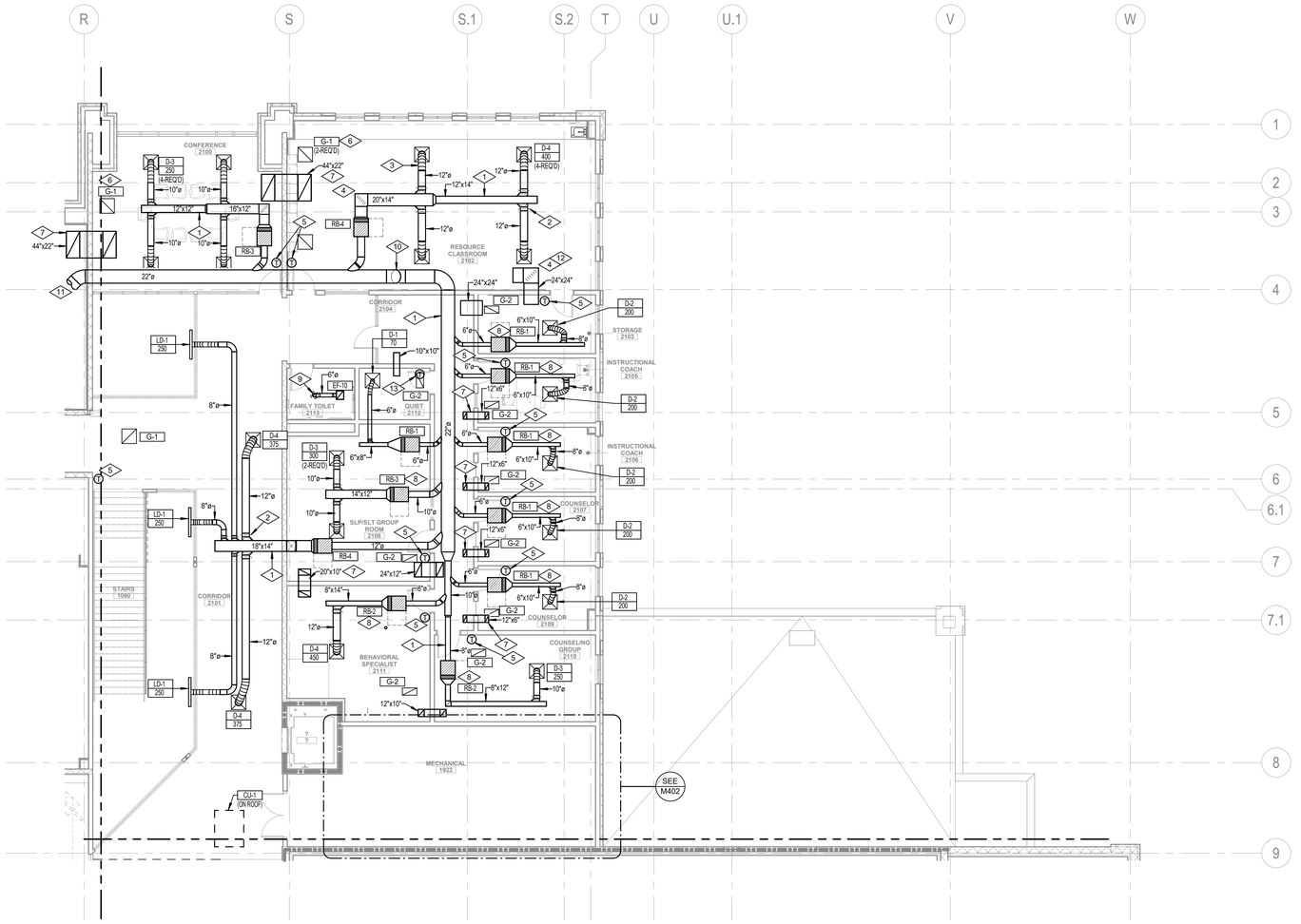
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PLAN - LEVEL 01 - AREA 14

M114

11/15/2023 2:48:08 PM



MECHANICAL PLAN - LEVEL 02 - AREA 21

NORTH

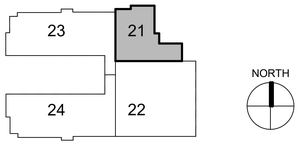
0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. HIGH EFFICIENCY TAKE-OFF FITTING WITH VOLUME CONTROL BALANCING DAMPER (TYPICAL).
3. FLEXIBLE DUCTWORK. MAXIMUM LENGTH 5'-0" (TYPICAL).
4. TURNING VANES (TYPICAL).
5. WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL).
6. PROVIDE DUCT BOARD SOUND BOOT AT RETURN AIR GRILLE (TYPICAL). SEE DETAIL 2/M606.
7. TRANSFER AIR DUCT ABOVE CEILING (TYPICAL). SEE DETAIL 11/M602.
8. VAV BOX WITH REHEAT COIL SHALL BE LOCATED CLEAR OF LIGHTS, PIPING AND ALL TRADES TO ALLOW FULL ACCESS TO BOX CONTROL PANEL AND HEATING VALVES, ETC. MINIMUM 24" CLEAR SERVICE AREA SHALL BE MAINTAINED (TYPICAL).
9. 6" DIA. EXHAUST AIR DUCT UP THRU ROOF. TERMINATE DUCT 24" ABOVE ROOF IN NON-BACKDRAFT TYPE VENT CAP. SEE DETAIL 12/M602.
10. DUCT RISE/DROP ON 45 DEG. OR SHALLOWER.
11. SEE M223 FOR CONTINUATION.
12. TRANSFER AIR DUCT ABOVE CEILING. (TYPICAL)
13. LOCATE TEMPERATURE SENSOR IN RETURN AIR GRILLE LOCATED IN THE CEILING.

KEY PLAN - UPPER LEVEL



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OGDEN SCHOOL DISTRICT

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OSD HILLCREST ELEMENTARY REBUILD

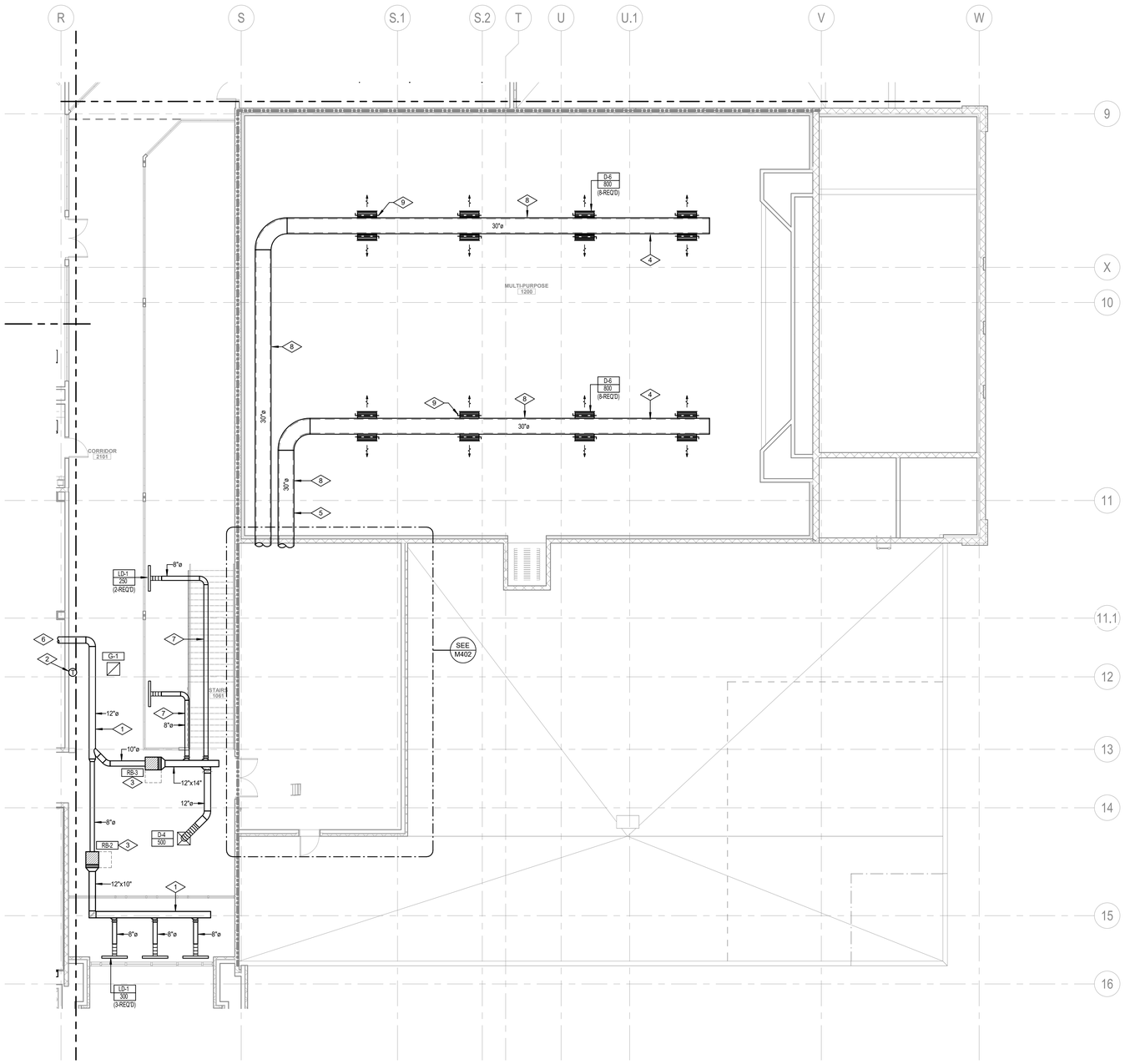
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PLAN - LEVEL 02 - AREA 21

M221

11/16/2023 2:18:20 PM



MECHANICAL PLAN - LEVEL 02 - AREA 22

0 4' - 0" 8' - 0" 16' - 0"

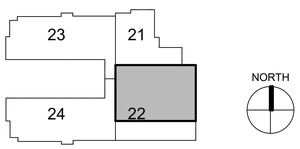
SCALE: 1/8" = 1'-0"

NORTH

REFERENCE NOTES

1. DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL).
3. VAV BOX WITH REHEAT COIL SHALL BE LOCATED CLEAR OF LIGHTS, PIPING AND ALL TRADES TO ALLOW FULL ACCESS TO BOX CONTROL PANEL AND HEATING VALVES, ETC. MINIMUM 24" CLEAR SERVICE AREA SHALL BE MAINTAINED (TYPICAL).
4. DUCTWORK TO RUN EXPOSED IN JOIST WEBBING.
5. DUCTWORK TO RUN EXPOSED CENTERED BETWEEN JOISTS.
6. SEE SHEET M402 FOR CONTINUATION.
7. DUCTWORK TO RUN ABOVE CEILING CLOUD AS HIGH AND TIGHT AS POSSIBLE TO STRUCTURE.
8. PROVIDE K-27 INSULATED DUCTWORK WITH PERFORATED METAL LINER.
9. MANUAL BALANCING DAMPER. (TYPICAL)

KEY PLAN - UPPER LEVEL



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OGDEN SCHOOL DISTRICT

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OSD HILLCREST ELEMENTARY REBUILD

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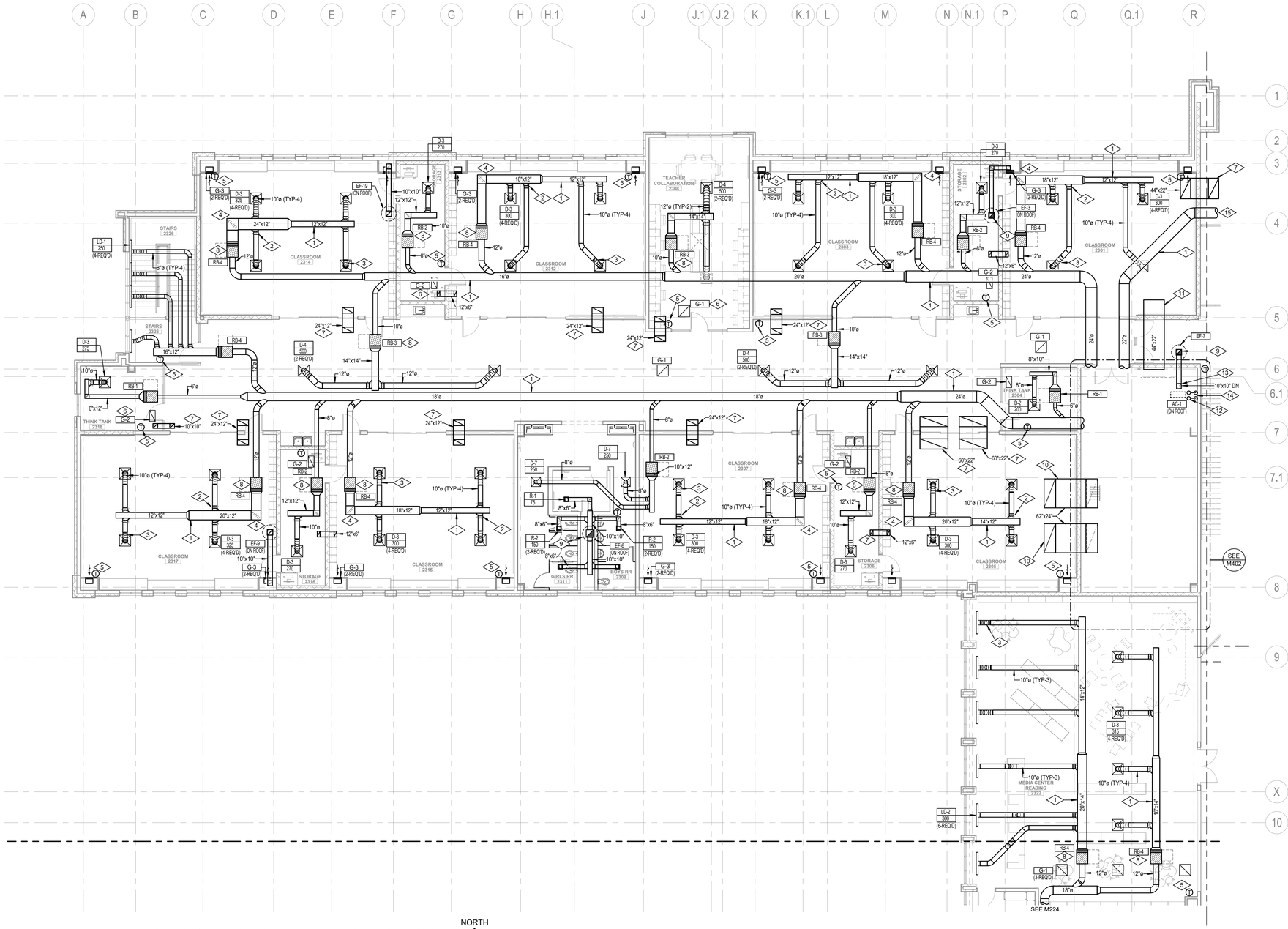
BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PLAN - LEVEL 02 - AREA 22

M222

11/6/2023 4:58:02 PM



MECHANICAL PLAN - LEVEL 02 - AREA 23

NORTH

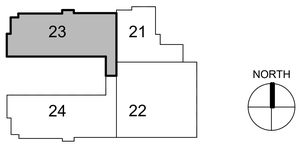
0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. HIGH EFFICIENCY TAKE-OFF FITTING WITH VOLUME CONTROL BALANCING DAMPER (TYPICAL).
3. FLEXIBLE DUCTWORK. MAXIMUM LENGTH 5'-0" (TYPICAL).
4. TURNING VANES (TYPICAL).
5. WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL).
6. PROVIDE DUCT BOARD SOUND BOOT AT RETURN AIR GRILLE (TYPICAL). SEE DETAIL 2/M606.
7. TRANSFER AIR DUCT ABOVE CEILING (TYPICAL). SEE DETAIL 11/M602.
8. VAV BOX WITH REHEAT COIL SHALL BE LOCATED CLEAR OF LIGHTS, PIPING AND ALL TRADES TO ALLOW FULL ACCESS TO BOX CONTROL PANEL AND HEATING VALVES, ETC. MINIMUM 24" CLEAR SERVICE AREA SHALL BE MAINTAINED (TYPICAL).
9. EXHAUST AIR DUCT RISE THRU ROOF. MAINTAIN A MINIMUM OF 15'-0" FROM ALL OUTSIDE AIR INTAKES.
10. PROVIDE K-27 INSULATED DUCTWORK WITH PERFORATED METAL LINER.
11. TRANSFER AIR DUCT ABOVE CEILING.
12. REFRIGERANT PIPING RISE THRU ROOF TO OUTDOOR AIR CONDITIONING UNIT "AC-1"
13. EXHAUST DUCT UP FROM FLOOR BELOW. SEE SHEET M113 FOR CONTINUATION.
14. REFRIGERANT PIPING UP FROM BELOW. SEE SHEET M113 FOR CONTINUATION.
15. SEE SHEET M221 FOR CONTINUATION.

KEY PLAN - UPPER LEVEL



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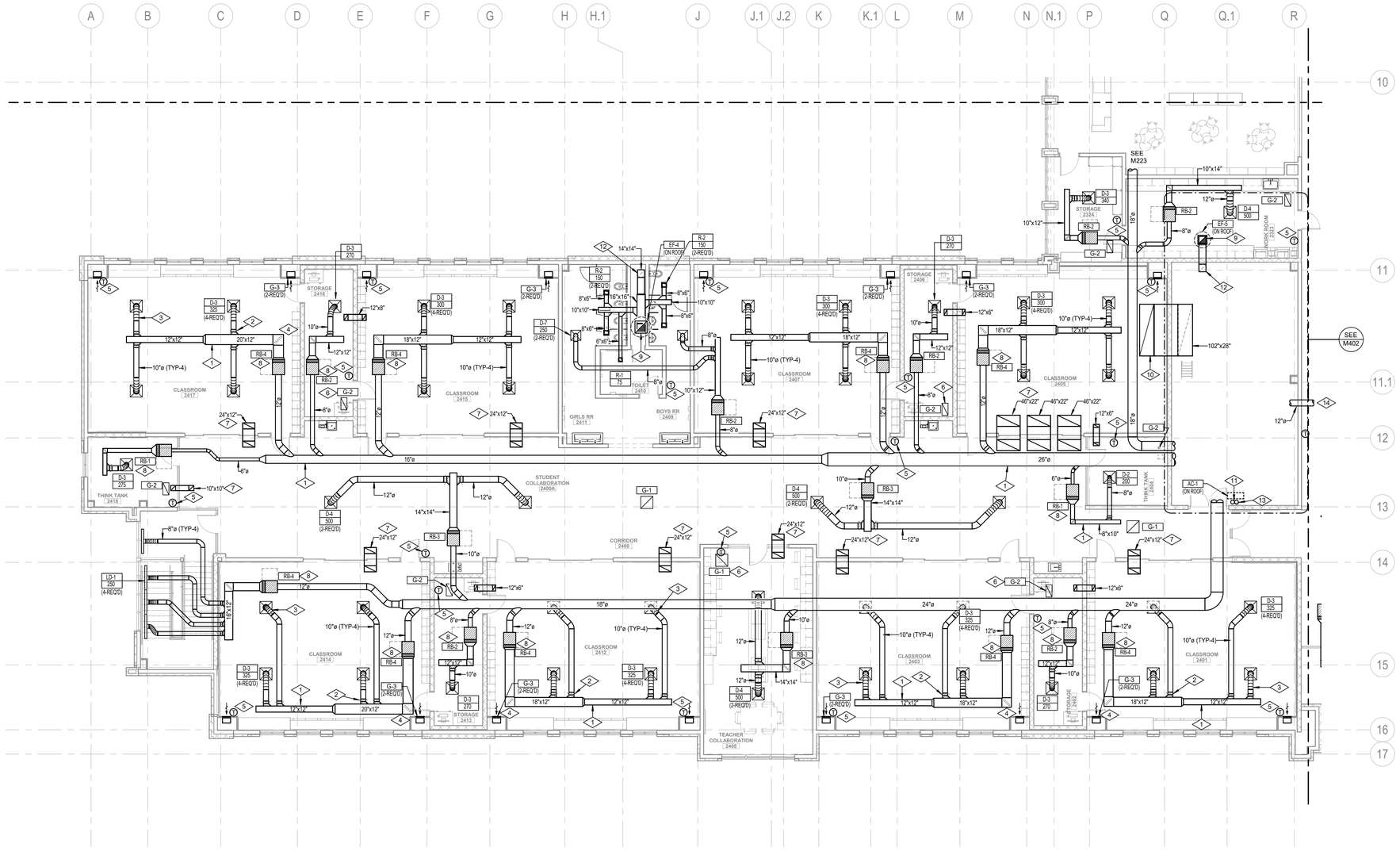
BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PLAN - LEVEL 02 - AREA 23

M223

11/15/2023 2:48:14 PM



MECHANICAL PLAN - LEVEL 02 - AREA 24

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

NORTH

REFERENCE NOTES

1. DUCTWORK TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. HIGH EFFICIENCY TAKE-OFF FITTING WITH VOLUME CONTROL BALANCING DAMPER (TYPICAL).
3. FLEXIBLE DUCTWORK. MAXIMUM LENGTH 5'-0" (TYPICAL).
4. TURNING VANES (TYPICAL).
5. WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL).
6. PROVIDE DUCT BOARD SOUND BOOT AT RETURN AIR GRILLE (TYPICAL). SEE DETAIL 2/M606.
7. TRANSFER AIR DUCT ABOVE CEILING (TYPICAL). SEE DETAIL 11/M602.
8. VAV BOX WITH REHEAT COIL SHALL BE LOCATED CLEAR OF LIGHTS, PIPING AND ALL TRADES TO ALLOW FULL ACCESS TO BOX CONTROL PANEL AND HEATING VALVES, ETC. MINIMUM 24" CLEAR SERVICE AREA SHALL BE MAINTAINED (TYPICAL).
9. EXHAUST AIR DUCT RISE THRU ROOF. MAINTAIN A MINIMUM OF 15'-0" FROM ALL OUTSIDE AIR INTAKES.
10. PROVIDE K-27 INSULATED DUCTWORK WITH PERFORATED METAL LINER.
11. REFRIGERANT PIPING RISE THRU ROOF TO OUTDOOR AIR CONDITIONING UNIT "AC-1".
12. EXHAUST DUCT UP FROM FLOOR BELOW. SEE SHEET M114 FOR CONTINUATION.
13. REFRIGERANT PIPING UP FROM BELOW. SEE SHEET M114 FOR CONTINUATION.
14. SEE SHEET M222 FOR CONTINUATION.

KEY PLAN - UPPER LEVEL

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BID PACKAGE 5 - GENERAL CONSTRUCTION

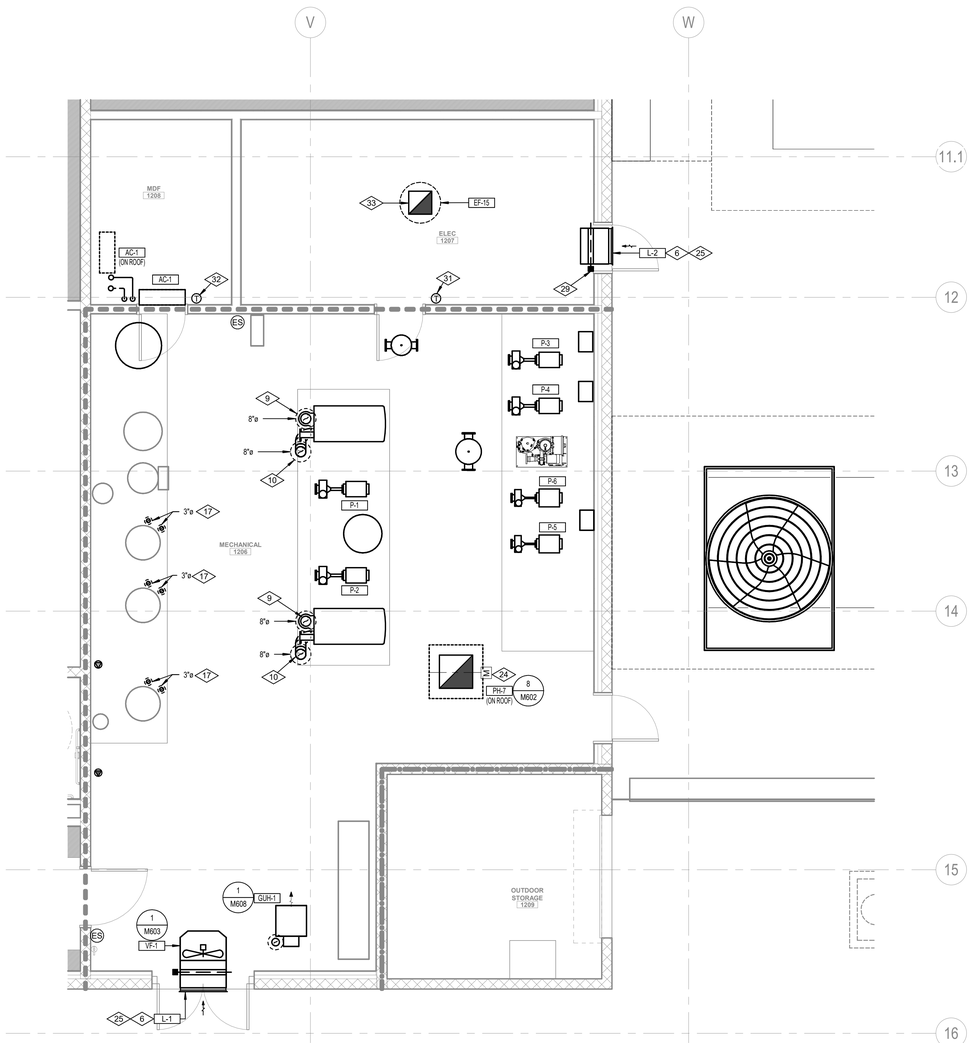
MECHANICAL PLAN - LEVEL 02 - AREA 24

M224

11/6/2023 4:58:13 PM

REFERENCE NOTES

1. PIPING TO RUN EXPOSED AS HIGH AS POSSIBLE. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. 4" CONCRETE HOUSEKEEPING PAD. (COORDINATE ARCHITECTURAL AND STRUCTURAL PLANS) PAD BY GENERAL CONTRACTOR.
3. WATER SOFTENER LOCATION. SEE PLUMBING PLANS.
4. 120 DEG. F. HOT WATER HEATER LOCATION. SEE PLUMBING PLANS.
5. 140 DEG. F. HOT WATER HEATER LOCATION. SEE PLUMBING PLANS.
6. COORDINATE EXACT LOUVER LOCATION AND ELEVATION WITH ARCHITECT. LOUVER TO BE CENTERED IN BLOCK COURSE.
7. WALL MOUNTED HEATING/COOLING THERMOSTAT TO CONTROL OPERATION OF GAS UNIT HEATER 'GUH-1' AND VENTILATION FAN 'VF-1' (TYPICAL).
8. WALL MOUNTED HEATING THERMOSTAT TO CONTROL OPERATION OF UNIT HEATER 'UH-1' (TYPICAL).
9. 8" DIA. BOILER VENT STACK UP THRU ROOF. TERMINATE STACK 60â€ ABOVE ROOF ELEVATION IN A U.L. LISTED APPROVED STACK CAP PER BOILER MANUFACTURER'S INSTALLATION RECOMMENDATION.
10. 8" DIA. BOILER OUTDOOR AIR INTAKE UP THRU ROOF. TERMINATE STACK 24â€ ABOVE ROOF ELEVATION PER BOILER MANUFACTURER'S INSTALLATION RECOMMENDATION.
11. FIRE SEAL PIPE PENETRATIONS AT BOTH SIDES OF WALL. CORE DRILL WALL. HOLE TO BE SIZED TO ALLOW CONTINUOUS INSULATION (TYPCIAL).
12. CORE DRILL OR SLEEVE WALL. HOLE TO BE SIZED TO ALLOW CONTINUOUS INSULATION (TYPCIAL). SEAL AROUND PENETRATION WEATHERTIGHT.
13. ICCS WATER PIPING TO RUN LOW ABOVE GRADE. PROVIDE ALUMINUM JACKET PER SPECIFICATIONS.
14. SUPPORT PIPING WITH PAINTED METAL STAND ON CONCRETE FOOTING (TYPICAL).
15. PROVIDE BUTTERFLY TYPE SHUT-OFF VALVE (TYPCIAL).
16. 1/2" GLYCOL FEED PIPING TO RUN AS HIGH AS POSSIBLE.
17. WATER HEATER CONCENTRIC TERMINATION KIT. INSTALL PER WATER HEATER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
18. HEATING HOT WATER PUMP VARIABLE FREQUENCY DRIVE LOCATION. DIVISION 23 SHALL PROVIDE VFD. VFD'S SHALL BE MOUNTED ON UNISTRUT SUPPORT STAND. COORDINATE EXACT LOCATION WITH ALL EQUIPMENT AND DIVISION 26.
19. BOILER PUMP.
20. BOILER ISOLATION ATC VALVE (TYPICAL).
21. ATC PANEL. DIV. 26 CONTRACTOR TO PROVIDE 120/1/60 SERVICE.
22. WALL MOUNTED EMERGENCY GAS SHUT-OFF SWITCH. SEE SCHEMATIC DETAIL 5/M603 AND SPECIFICATIONS FOR BOILER AND WATER HEATER EMERGENCY SHUT-DOWN REQUIREMENTS.
23. BOILER WATER LOOP CONNECTION TO BUILDING LOOP. 20" FROM CENTERLINE OF BOILER LOOP HWS/HWR REQUIRED. REFER TO BOILER MANUFACTURER'S REQUIREMENTS.
24. PROVIDE MOTORIZED ATC DAMPER. INTERLOCK DAMPER TO OPEN WHEN 'VF-1' IS ENERGIZED.
25. PROVIDE FLASHING OVER TOP OF BLOCK AT BOTTOM OF LOUVER. FLASHING SHALL SLOPE AWAY FROM FACE OF LOUVER. FLASHING COLOR SHALL MATCH LOUVER.
26. COOLING TOWER FAN VARIABLE FREQUENCY DRIVE LOCATION.
27. COOLING TOWER CHEMICAL TREATMENT SYSTEM.
28. BALL VALVE (TYPICAL).
29. PROVIDE MOTORIZED ATC DAMPER. INTERLOCK DAMPER TO OPEN WHEN EF-15 IS ENERGIZED.
30. HW PRESSURE DIFFERENTIAL SENSOR. COORDINATE EXACT LOCATION WITH ATC CONTRACTOR.
31. WALL MOUNTED COOLING THERMOSTAT.
32. WALL MOUNTED HARD WIRE COOLING THERMOSTAT.
33. DUCT THRU ROOF. COORDINATE WITH STRUCTURE.



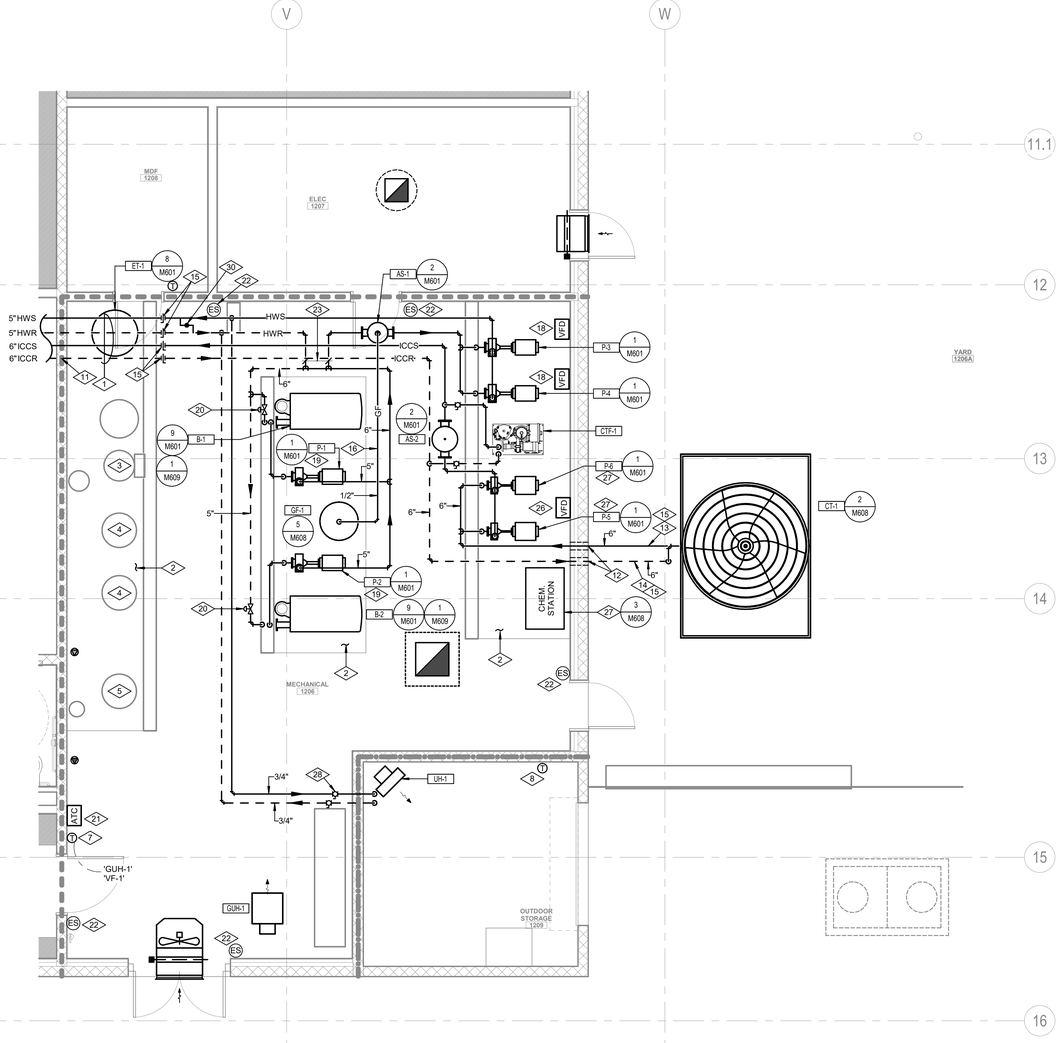
ENLARGED MECHANICAL PLAN

0 2' - 0" 4' - 0" 8' - 0"

SCALE: 1/4" = 1'-0"

DUCTWORK

NORTH



ENLARGED MECHANICAL PLAN

0 2' - 0" 4' - 0" 8' - 0"

SCALE: 1/4" = 1'-0"

MECHANICAL PIPING

NORTH

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED MECHANICAL PLAN

M401

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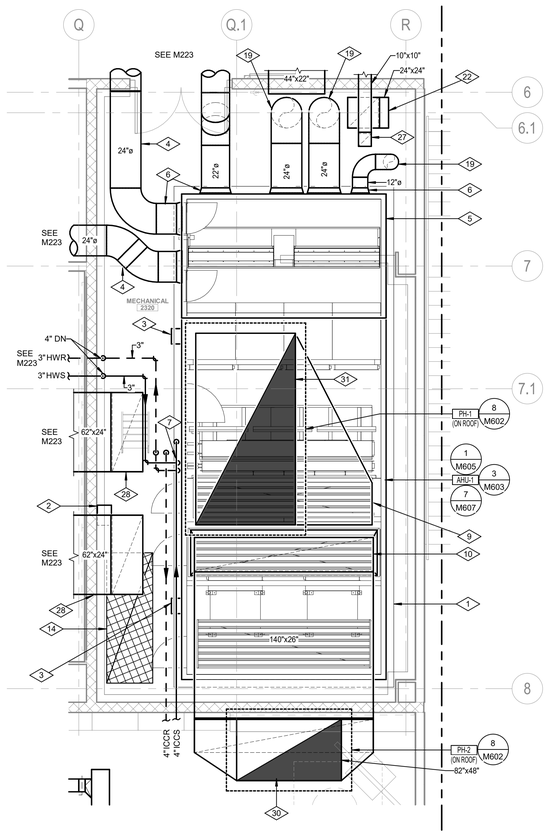

ENLARGED MECHANICAL PLAN - AREA 23

NORTH

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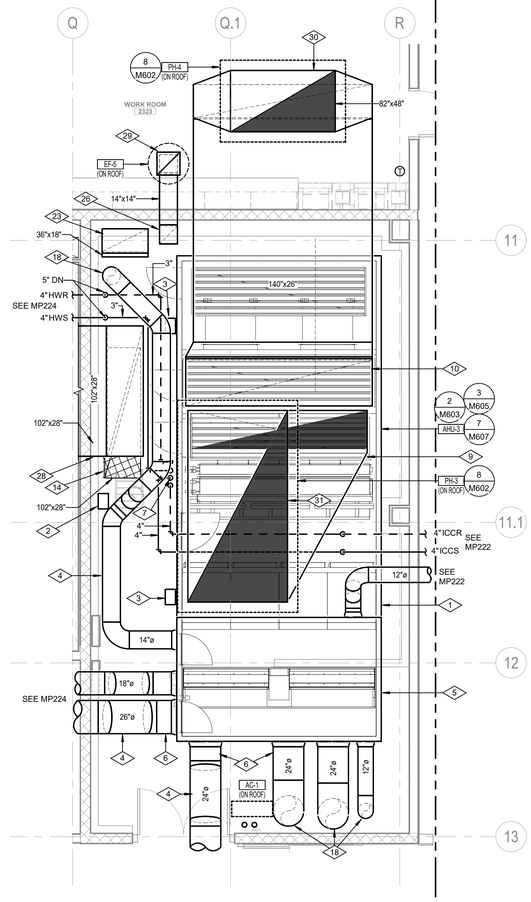
SCALE: 1/4" = 1'-0"



ENLARGED MECHANICAL PLAN - AREA 24

NORTH

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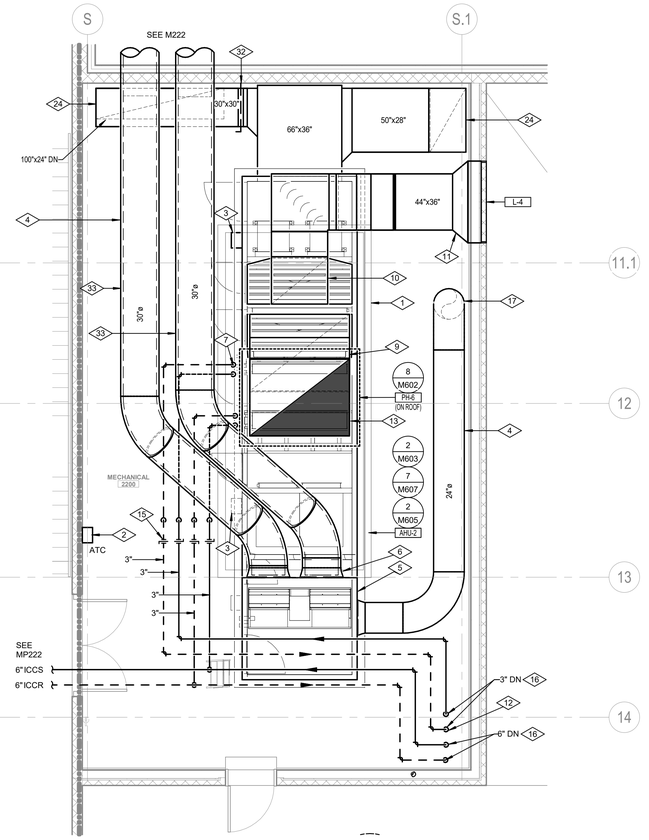
SCALE: 1/4" = 1'-0"

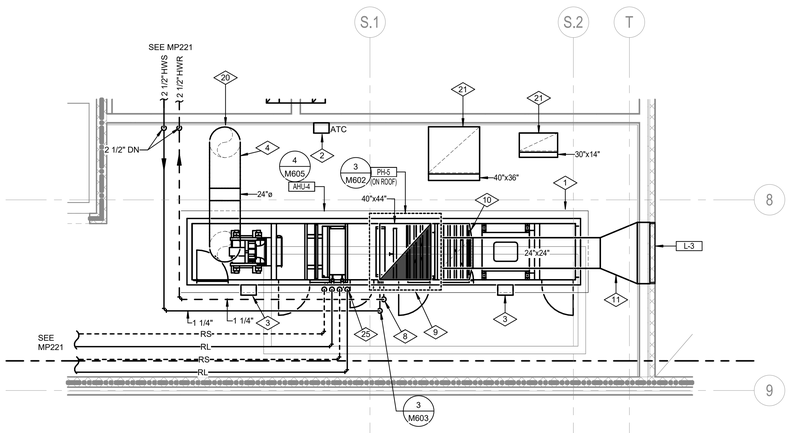


ENLARGED MECHANICAL PLAN - AREA 22

NORTH

0 2' - 0" 4' - 0" 8' - 0"

SCALE: 1/4" = 1'-0"



ENLARGED MECHANICAL PLAN - LEVEL 02 - AREA 21

NORTH

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/4" = 1'-0"

REFERENCE NOTES

#	
1	INSTALL AIR HANDLING UNIT ON 4" HIGH CONCRETE HOUSEKEEPING PAD. PAD BY GENERAL CONTRACTOR.
2	ATC PANEL. DIV. 26 CONTRACTOR TO PROVIDE 120/1/60 SERVICE.
3	DIVISION 23 SHALL PROVIDE VFD FOR SUPPLY & RETURN FANS. VFD'S SHALL BE MOUNTED ON UNISTRUT SUPPORT STAND. COORDINATE EXACT LOCATION WITH ALL EQUIPMENT AND DIVISION 26.
4	DUCTWORK TO RUN AS HIGH AS POSSIBLE.
5	SUPPLY AIR PLENUM ON TOP OF AIR HANDLING UNIT. COORDINATE HEIGHT OF PLENUM WITH STRUCTURE. PLENUM TO BE PROVIDED BY AIR HANDLING UNIT MANUFACTURE.
6	PROVIDE BELLMOUTH FITTING. (TYPICAL)
7	PROVIDE 3-WAY ATC VALVE ON HEATING AND ICC WATER PIPING. SET BYPASS TO GPM SHOWN ON SCHEDULE.
8	PROVIDE 3-WAY ATC VALVE ON HEATING HOT WATER PIPING. SET BYPASS TO GPM SHOWN SCHEDULE.
9	PROVIDE DUCT TRANSITION FROM ROOF MOUNTED LOUVERED PENTHOUSE TO AIR HANDLING UNIT OUTDOOR AIR INTAKE.
10	PROVIDE DUCT TRANSITION TO AIR HANDLING UNIT RELIEF AIR OUTLET TO RELIEF AIR DUCT.
11	PROVIDE DUCT TRANSITION FROM WALL MOUNTED LOUVER TO RELIEF AIR DUCT.
12	SEAL PIPING PENETRATIONS WATER TIGHT.
13	DUCT THRU ROOF. COORDINATE EXACT LOCATION WITH STRUCTURE.
14	PROVIDE HEAVY DUTY ALUMINUM GRATE WITH FRAME AT RETURN AIR OPENING.
15	PROVIDE BUTTERFLY TYPE SHUT-OFF VALVES.
16	HEATING HOT WATER SUPPLY AND RETURN AND ICC WATER SUPPLY AND RETURN PIPING UP FROM FLOOR BELOW. SEE SHEET MP112 FOR CONTINUATION. PROVIDE BUTTERFLY TYPE SHUT-OFF VALVES IN PIPING AT 5'-0" ABOVE FINISHED FLOOR.
17	SUPPLY AIR DUCT DOWN TO FLOOR BELOW. SEE SHEET M112 FOR CONTINUATION.
18	SUPPLY AIR DUCT DOWN TO FLOOR BELOW. SEE SHEET M114 FOR CONTINUATION.
19	SUPPLY AIR DUCT DOWN TO FLOOR BELOW. SEE SHEET M113 FOR CONTINUATION.
20	SUPPLY AIR DUCT DOWN TO FLOOR BELOW. SEE SHEET M111 FOR CONTINUATION.
21	RETURN AIR DUCT UP FROM FLOOR BELOW. RISE DUCT AS HIGH AS POSSIBLE. SEE M111 FOR CONTINUATION.
22	RETURN AIR DUCT UP FROM FLOOR BELOW. RISE DUCT AS HIGH AS POSSIBLE. SEE M113 FOR CONTINUATION.
23	RETURN AIR DUCT UP FROM FLOOR BELOW. RISE DUCT AS HIGH AS POSSIBLE. SEE M114 FOR CONTINUATION.
24	RETURN AIR DUCT UP FROM FLOOR BELOW. SEE SHEET M112 FOR CONTINUATION.
25	REFRIGERANT LINES UP THRU ROOF RO CU-1. SEE DETAIL 2/M607. LINES TO PENETRATE ROOF AND FLASH INDIVIDUALLY.
26	EXHAUST AIR DUCT UP FORM FLOOR BELOW. SEE SHEET M112 FOR CONTINUATION.
27	EXHAUST AIR DUCT UP FORM FLOOR BELOW. SEE SHEET M113 FOR CONTINUATION.
28	RETURN AIR DUCT TO RUN AS HIGH AS POSSIBLE. TURN RETURN AIR DUCT DOWN AND TERMINATE.
29	EXHAUST DUCT UP THRU ROOF TO EXHAUST FAN. COORDINATE DUCT PENETRATION WITH STRUCTURE.
30	RELEIF AIR DUCT UP TO PENTHOUSE ON ROOF. COORDINATE DUCT PENETRATION WITH STRUCTURE.
31	OUTSIDE AIR DUCT UP TO PENTHOUSE ON ROOF. COORDINATE DUCT PENETRATION WITH STRUCTURE.
32	PROVIDE MANUAL BALANCING DAMPER IN RETURN AIR DUCT. BALANCE TO 6400 CFM.
33	PROVIDE K-27 INSULATED DUCTWORK WITH PERFORATED METAL LINER.

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023
LICENSED PROFESSIONAL ENGINEER #334524-2202 JAMES AUSTIN BERRETT 11/6/2023 UTAH
OLSEN & PETERSON CREATIVE ENGINEERS, INC.
OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED MECHANICAL PLAN

M402

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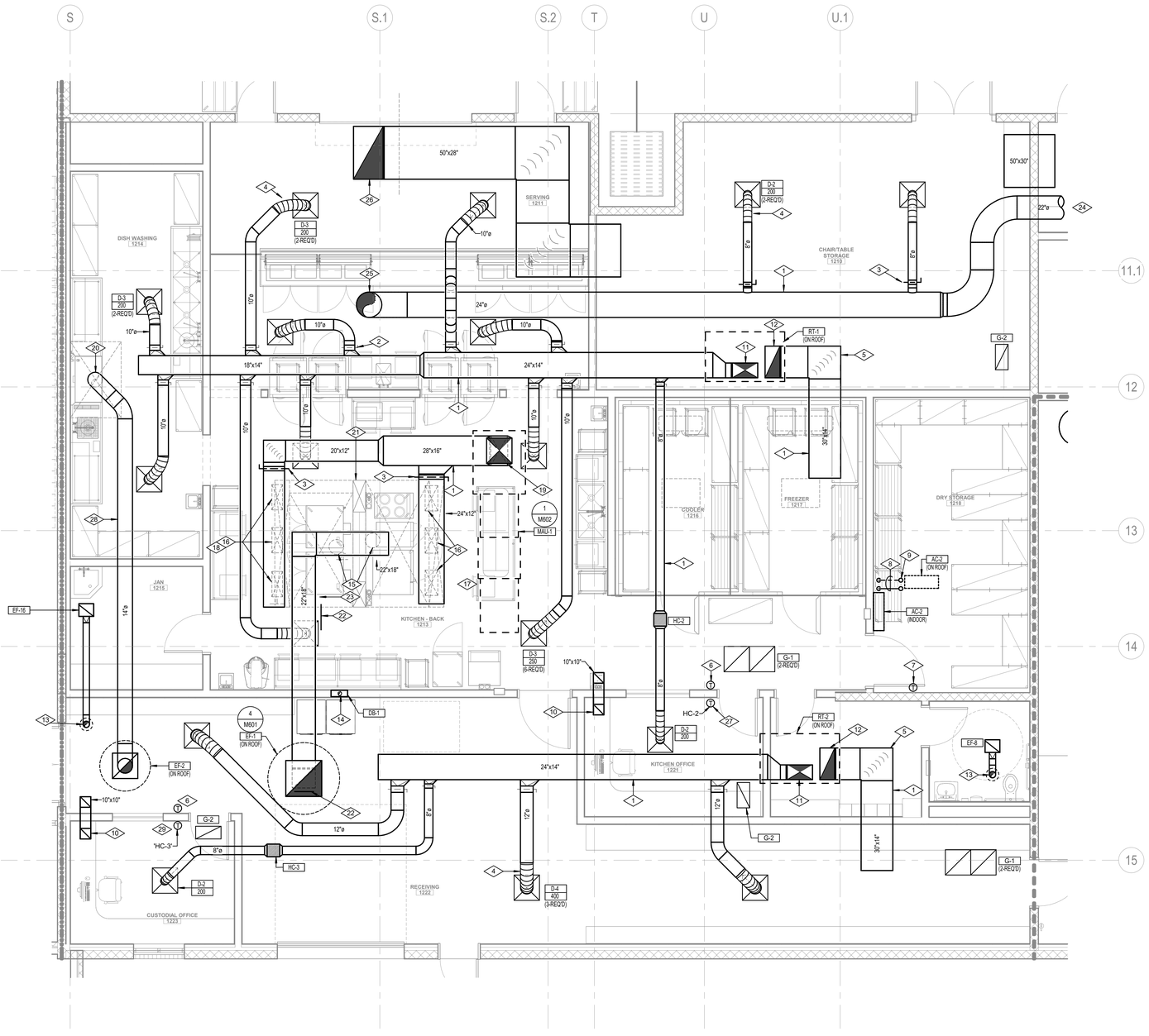

REFERENCE NOTES

1	DUCTWORK TO RUN ABOVE CEILING. COORDINATE ROUTING WITH STRUCTURE AND ALL TRADES (TYPICAL).
2	HIGH EFFICIENCY TAKE-OFF FITTING WITH VOLUME CONTROL BALANCING DAMPER (TYPICAL).
3	MANUAL VOLUME CONTROL BALANCING DAMPER. (TYPICAL)
4	FLEXIBLE DUCT (TYPICAL). MAXIMUM LENGTH 5'-0".
5	TURNING VANES (TYPICAL).
6	WALL MOUNTED HEATING/COOLING THERMOSTAT (TYPICAL).
7	WALL MOUNTED COOLING THERMOSTAT TO CONTROL OPERATION OF AIR CONDITIONING UNIT "AC-2".
8	REFRIGERANT PIPING TO RUN ABOVE CEILING AS HIGH AS POSSIBLE.
9	REFRIGERANT PIPING RISE THRU ROOF TO OUTDOOR AIR CONDITIONING UNIT "AC-2".
10	TRANSFER AIR DUCT ABOVE CEILING. (TYPICAL) SEE DETAIL 11/M602.
11	SUPPLY AIR DUCT DOWN THRU ROOF FROM ROOFTOP UNIT. COORDINATE EXACT LOCATION WITH STRUCTURE AND UNIT PROVIDED.
12	RETURN AIR DUCT UP THRU ROOF FROM ROOFTOP UNIT. COORDINATE EXACT LOCATION WITH STRUCTURE AND UNIT PROVIDED.
13	6" DIA. EXHAUST AIR DUCT UP THROUGH ROOF. PROVIDE BACKDRAFT TYPE VENT CAP ON DUCT. 24" MIN. ABOVE ROOF ELEVATION. MAINTAIN A MINIMUM OF 15'-0" FROM ALL OUTSIDE AIR INTAKES. SEE DETAIL 12/M602.
14	4" DIA. ALUMINUM CLOTHES DRYER VENT RISE THRU ROOF. TERMINATE VENT 24" MIN. ABOVE ROOF HORIZONTALLY WITH DRYER VENT CAP WITH BACKDRAFT DAMPER. SEE DETAIL 1/M606.
15	EXHAUST CONNECTIONS TO COOK HOOD. COORDINATE WITH HOOD PROVIDED.
16	MAKE-UP CONNECTIONS TO COOK HOOD. COORDINATE WITH HOOD PROVIDED.
17	PROVIDE VOLUME CONTROL BALANCING DAMPERS IN 24"X12" MAKE-UP AIR DUCT (TYPICAL). COORDINATE WITH HOOD PROVIDED.
18	PROVIDE VOLUME CONTROL BALANCING DAMPERS IN 24"X10" MAKE-UP AIR DUCT (TYPICAL). COORDINATE WITH HOOD PROVIDED.
19	MAKE-UP AIR DUCT DOWN THRU ROOF. COORDINATE WITH STRUCTURE AND UNIT PROVIDED.
20	EXHAUST CONNECTION TO DISHWASHER HOOD. COORDINATE WITH HOOD PROVIDED.
21	KITCHEN HOOD EXHAUST AND MAKE-UP AIR CONTROLS TO BE LOCATED IN UDS WALL (COORDINATE WITH UDS POWER). SEE DETAIL 6/M608.
22	GREASE DUCT ACCESS DOORS (TYPICAL). SEE DETAIL 5/M606.
23	INSURE GREASE DUCT HAS 4" MIN. CLEARANCE FOR GREASE DUCT WRAP.
24	SEE SHEET M112 FOR CONTINUATION.
25	SUPPLY AIR DUCT UP TO FLOOR ABOVE. SEE SHEET M402.
26	RETURN AIR DUCT UP TO FLOOR ABOVE. SEE SHEET M402.
27	WALL MOUNTED HEATING THERMOSTAT TO CONTROL "HC-2".
28	EXHAUST DUCT FROM DISHWASHER TO SLOPE BACK TO DISHWASHER HOOD.
29	WALL MOUNTED HEATING THERMOSTAT TO CONTROL "HC-3".

ENLARGED MECHANICAL KITCHEN PLAN

NORTH

0 2' - 0" 4' - 0" 8' - 0"

SCALE: 1/4" = 1'-0"

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED KITCHEN MECHANICAL PLAN

M403

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CUSTOM AIR HANDLING UNIT SCHEDULE

SYMBOL	AREA SERVED	COOLING CFM	HEATING CFM	APPROX. O.A.	SUPPLY FANS				RETURN/ RELIEF FANS				POWER	HEATING COIL									VALVE TYPE/ BYPASS GPM	INDIRECT COOLING COIL									COOLING VALVE TYPE / BYPASS GPM	UNIT WTS. LBS	UNIT DIMENSIONS	MAKE & MODEL	NOTES
					E.S.P.	# OF FANS	H.P.	MAX. BHP	E.S.P.	# OF FANS	H.P.	MAX. BHP		ROWS	# COILS	E.A.T	L.A.T.	E.W.T.	L.W.T.	GPM	MBH TOTAL	W.P.D. FT	A.P.D. FT		ROWS	# COILS	E.A.T	L.A.T.	E.W.T.	L.W.T.	GPM	MBH TOTAL / SENSIBLE	W.P.D. FT	A.P.D IN					
AHU-1	AREA 13 & 23	40,000	24,000	12,000	2.75"	8	7.5	5.53	.9"	2	7.5	6.45	460/3/60	1	2	25	60	140	120	90	861.9	4.78	.03	3-WAY / 10 GPM	6	2	97 DB / 63 WB	70	66	76	183.6	916.0	13.36	0.42	3-WAY / 183.6	35,000	380" L X 160" W X 102" H	UNITECH	1,2,3,5,6,7
AHU-2	MULTIPURPOSE	16,000	9,600	4,000	1.25"	4	5	3.02	.8"	2	3	2.11	460/3/60	3	2	5	101	140	120	100	963.0	7.30	0.12	2 - WAY	6	2	97 DB / 63 WB	71	66	76	72.9	363.8	36.5	0.41	3-WAY / 72.9	14,000	394" L X 90" W X 80" H	UNITECH	2,3,4,5,6,7
AHU-3	AREA 14 & 24	40,500	24,300	12,000	2.75"	8	7.5	5.53	.9"	2	7.5	6.45	460/3/60	1	2	25	60	140	120	90	61.98	4.78	.03	2 - WAY	6	2	97 DB / 63 WB	70	66	76	185.6	925.9	13.62	0.42	3-WAY / 185.6	35,000	380" L X 160" W X 102" H	UNITECH	1,2,3,5,6,7
AHU-4	ADMIN AREA	6,205	3,723	100	1.25"	2	3	2.43	.55"	2	2	1.47	460/3/60	2	2	25	60	140	120	10.5	150.6	10.34	0.03	3-WAY / 5 GPM	3	2	95 DB /67 WB	--	--	--	--	--	--	--	--	11,500	308" L X 52" W X 70" H	UNITECH	1,3,6,8

NOTES:
1. HEATING CAPACITY BASED ON 140 DEG F. ENT. WATER AND 25 DEG. F. ENT AIR WITH 30% PROPYLENE GLYCOL. MIN. 2 - ROW COIL.
2. UNIT SHALL BE COMPLETE WITH INDIRECT COOLING COIL. SEE INDIRECT COOLING COIL SCHEDULE FOR CAPACITIES.
3. V.F.D. CONTROL. SEE SPECIFICATIONS. VFD'S TO BE MOUNTED ON UNIT.
4. HEATING CAPACITY BASED ON 140 DEG. F. ENT. WATER AND 5° F. ENT. AIR WITH 30% PROPYLENE GLYCOL. MIN. 2 - ROW COIL.
5. INDIRECT COOLING CAPACITY BASED ON 66 DEG. F. EWT, 97 DEG. EAT.
6. SINGLE POINT POWER CONNECTION REQUIRED.
7. UNIT TO BE COMPLETE WITH EVAPORATIVE COOLING SECTION.
8. UNIT SHALL BE COMPLETE WITH DX COOLING COIL

GAS FIRED / DX ROOF TOP UNIT SCHEDULE

SYMBOL	LOCATION	CFM	E.S.P	MIN. O.A. CFM	DX - COOLING CAPACITY			GAS - HEATING CAPACITY			POWER	MCA	MOCP	RT-SIZE	UNIT WTS. LBS	MAKE & MODEL	NOTES
					DX MBH	DX SENSIBLE MBH	DX EFFICIENCY	GAS MBH INPUT	GAS MBH OUTPUT	GAS EFFICIENCY							
RT-1	KITCHEN	2000	.75"	300	46.59	46.59	14.00 SEER	88.0	70.4	80%	460/3/60	13	20	74.4" L x 46.6" W x 33.4" H	1000	CARRIER - 48FCEA06	1-5
RT-2	RECEIVING AREA	1400	.40"	300	35.30	33.67	14.00 SEER	88.0	70.4	80 %	460/3/60	11	15	74.4" L x 46.6" W x 33.4" H	1000	CARRIER - 48FCEA05	1-5

NOTES:
1. DX COOLING CAPACITY TO BE BASED ON 105°F AMBIENT, 80°F EAT (db), and 62°F EAT (wb). NATURAL GAS FIRED
2. FAN CFM AT PROJECT ALTITUDE
3. PROVIDE 2" PLEATED FILTERS, 18" FACTORY ROOF CURB, FACTORY DISCONNECT, AND HAIL GUARDS.
4. PROVIDE FACTORY UN-POWERED 15 AMP@ 120/1/60 CONVENIENCE OUTLET.
5. PROVIDE 100% DRY BULB ECONOMIZER.

CONDENSING UNIT SCHEDULE

SYMBOL	SERVES	# OF CIRCUIT	TONS	UNIT WTS. LBS	EER / IEER	SUCTION TEMP.	OUTSIDE AIR TEMP	ENTERING WB. TEMP.	POWER	MCA	MOCP	MAKE & MODEL
CU-1	AHU-4	2	10	700	11.2 / 14.9	45	95	67	460-3-60	21.0	25	CARRIER - 38AUD OR APPROVED EQUAL

NOTES:
1. CAPACITIES BASED ON 4200.0 FT. ELEV., 80 DEG. F. db, 67 DEG. F. wb AIR ENTERING EVAPORATOR AND 95 DEG. F.
2. UNIT SHALL BE COMPLETE WITH CRANKCASE HEATER, HIGH AND LOW PRESSURE SAFETY CONTROLS, AIR ENTERING CONDENSER.
3. FAN SCREEN AND ALL CONTROLS FOR AUTOMATIC OPERATION.
4. UNIT SHALL BE PROVIDED WITH MULTIPLE SCROLL COMPRESSORS (R410A). WITH UNIT MOUNTED VFD.

PUMP SCHEDULE

SYMBOL	TYPE	PUMP SYSTEM	SERVICE	GPM	FT. OF HEAD	FLUID TYPE	FLUID TEMP	MIN. EFFICIENCY	MOTOR	IMPELLER DIA (IN.)	MAKE & MODEL	NOTES
P-1	BASE MOUNTED	HEATING HOT WATER	BOILER LOOP	250	15	30% PG	140	81.6%	1.5 HP 460/3/60	7	B&G - 1532 3AD	1,2,4
P-2	BASE MOUNTED	HEATING HOT WATER	BOILER LOOP	250	15	30% PG	140	81.6%	1.5 HP 460/3/60	7	B&G - 1532 3AD	1,2,4
P-3	BASE MOUNTED	HEATING HOT WATER	BUILDING LOOP	250	80	30% PG	140	73.0%	10 HP 460/3/60	10.625	B&G - 1510 2EB	1,2,3
P-4	BASE MOUNTED	HEATING HOT WATER	BUILDING LOOP	250	80	30% PG	140	73.0%	10 HP 460/3/60	10.625	B&G - 1510 2EB	1,2,3
P-5	BASE MOUNTED	CONDENSER WATER	COOLING TOWER	440	60	WATER	76	81.1%	10 HP 460/3/60	8.375	B&G - 1510 3BD	2,4,5
P-6	BASE MOUNTED	CONDENSER WATER	COOLING TOWER	440	60	WATER	76	81.1%	10 HP 460/3/60	8.375	B&G - 1510 3BD	2,4,5

NOTES:
1. PUMPS TO BE SIZED FOR 140°F/30% PROPYLENE GLYCOL SOLUTION.
2. PUMPS TO BE NON-OVERLOADING TYPE. PUMPS TO BE C/W MATCHING SUCTION DIFFUSER.
3. PUMPS TO BE PROVIDED WITH MATCHING VFD.
4. PUMPS TO BE PROVIDED WITH SOFTSTART STARTER. BY DIV. 26
5. PUMPS TO BE SIZED FOR 76°F/ WATER.

MAKE-UP AIR UNIT SCHEDULE

SYMBOL	LOCATION	CFM	E.S.P	EVAP SECTION	FLOW CONFIG.	NATURAL GAS - HEATING CAPACITY			UNIT WTS. LBS	POWER	MCA	MOCP	H.P.	MAKE & MODEL	NOTES
						GAS MBH INPUT	GAS MBH OUTPUT	GAS EFFICIENCY							
MAU-1	KITCHEN	3240	.75"	YES	DOWN	280.7	227.4	81.0	1600	460	7.3	15	3	EA2-IBT-400-200-200-20D	1,2,3,4,5

NOTES:
1. NATURAL GAS FIRED.
2. FAN CFM AT PROJECT ALTITUDE
3. 2" PLEATED FILTERS, 14" FACTORY ROOF CURB, FACTORY DISCONNECT, RAIN HOOD, AND HAIL GUARDS.
4. FACTORY UN-POWERED 20 AMP@ 120/1/60 CONVENIENCE OUTLET.
5. INDIRECT FIRED

HEATING HOT WATER COIL

SYMBOL	CFM	COIL SIZE	HEATING M.B.H	HEATING COIL ROWS	HEATING COIL GPM	HEATING COIL W.P.D.	A.P.D.	E.W.T.	L.W.T.	L.A.T	MAKE & MODEL	NOTES
HC-1	2580	22.5" W x 22.5" H	72.0	2	7.6	12.78	0.33	140	160	95	RAE	1,2
HC-2	200	10" W x 10" H	12.0	1	3	2.32	0.04	140	160	95	RAE	1,2
HC-3	200	10" W x 10" H	12.0	1	3	2.32	0.04	140	160	95	RAE	1,2

NOTES:
1. CAPACITIES BASED ON 140° F. E.W.T., 65° F. E.A.T. & 95° F. L.A.T. W/30% PROPYLENE GLYCOL SOLUTION.
2. CONTRACTOR SHALL VERIFY COIL DIMENSIONS BEFORE FABRICATING DUCTWORK.

MECHANICAL EQUIPMENT SCHEDULE

B-1
B-2

BOILER: HEATING HOT WATER, 93.5% THERMAL EFFICIENT. NATURAL GAS FIRED, CONDENSING TYPE, 2,500,000 BTUH GAS INPUT, 2,337,500 BTUH OUTPUT, 30% PROPYLENE GLYCOL, 150 PSI ASME H STAMPED CONSTRUCTION, INSULATED STEEL JACKET, 8" DIA. FLUE OUTLET AND 8" DIA. COMBUSTION AIR INLET. PROVIDE FACTORY VENT AND INTAKE ROOF TERMINATION KITS, 4" SUPPLY AND RETURN WATER CONNECTIONS, 25 GPM MIN. FLOW, 350 GPM MAX. FLOW, 3.0 PSIG WATER PRESSURE DROP AT 218 GPM, CSD-1 COMPLIANT. ASME RELIEF VALVES, CONDENSATE NEUTRALIZER KIT, COMBINATION HIGH LIMIT AND LOW LIMIT CONTROLS, LOW WATER CUT-OFF, AND ALL CONTROLS FOR AUTOMATIC OPERATION. SINGLE POINT POWER CONNECTION WITH CONTROL TRANSFORMER. SET MAXIMUM SUPPLY TEMPERATURE TO 140 DEG. F. BOILER STAGING POINT NOT TO EXCEED 40%.
ELECTRICAL: 5.0 FLA AT 460/3/60
NOMINAL SIZE: 68.4" DEEP X 28" WIDE X 78" HEIGHT
OPERATING WT: 2,000 LBS.
MANUFACTURER: AERCO
MODEL: BENCHMARK BMK 2500

CT-1

COOLING TOWER: INDUCED DRAFT, OPEN CIRCUIT, COUNTER FLOW VERTICAL DISCHARGE CENTRIFUGAL TYPE, COOLER WITH STAINLESS STEEL BASIN, 146.67 TONS TO COOL 440 GPM OF WATER FROM 76 DEG.F. TO 66 DEG.F. WITH 62 DEG.F. WET BULB ENTERING AIR (1) 25 H.P. FAN MOTOR, 30 AMPS MOTOR, 480/3/60. (FAN SHALL OPERATE FROM A SINGLE VFD LOCATED IN BOILER ROOM) 24 AMP 120/1/60 CIRCUIT, 5- PROBE ELECTRONIC WATER LEVEL CONTROL PACKAGE, CORROSION CONTROL FINISH, 316 STAINLESS STEEL CONSTRUCTION, SUPER LOW SOUND FANS, SCREENED BOTTOM AND INLET PANELS, FACTORY STEEL SUPPORT BEAM BASE, EXTERNAL LADDER, FACTORY MOUNTED CROSSOVER PIPING AND ALL CONTROLS FOR AUTOMATIC OPERATION. UNIT TO HAVE WEATHER PROOF CABINET, (1) 8" INLETS, (1) 8" OUTLETS ON SAME END OF TOWER (SEE PIPING SCHEMATIC).
RIGGING WEIGHT: 6,930 LBS.
OPERATION WEIGHT: 10,790 LBS.
DIMENSIONS: 8'-5 1/2" L x 11'-11 3/4" W x 15'-5 3/4" H
MANUFACTURER: EVAPCO
MODEL: AT 19-4L12

AC-1

INDOOR UNIT: HEAT PUMP, WALL MOUNTED, HORIZONTAL DISCHARGE, 320-370-425CFM, 8,000-18,000 BTUH TOTAL COOLING CAPACITY AT 95°F O.A. TEMP, 80°F D.B. & 67°F W.B., 8,000-20,000 BTUH TOTAL HEATING CAPACITY AT 47°F O.A. TEMP, 70°F D.B. & 60°F W.B. MCA=1.0, 208/230/1/60 MOTOR TO BE UL LISTED. UNIT TO BE COMPLETE WITH CLEANABLE FILTER, INTEGRAL CONDENSATE PUMP, CHECK & EXPANSION VALVE KIT, PRE-CHARGED LINE SET, DRIP PAN AND DRAIN CONNECTION. PROVIDE WALL MOUNTED THERMOSTAT WITH NIGHT SET BACK. THERMOSTAT SHALL BE HARD WIRED TO UNIT.
UNIT DIM: 35 3/8" LENGTH X 11 5/8" HEIGHT X 9 13/16" DEPTH.
WEIGHT: 29 LBS.
SEER : 15.3
MANUFACTURER: MITSUBISHI, OR LG
MODEL: PKA-A18HA4

OUTDOOR UNIT: AIR COOLED, HORIZONTAL DISCHARGE, INVERTER COMPRESSOR, UNIT TO BE MOUNTED ON ROOF. 8,000-18,000 BTUH TOTAL COOLING CAPACITY AT 95°F O.A. TEMP, 80°F D.B. & 67°F W.B., 8,000-20,000 BTUH TOTAL HEATING CAPACITY AT 47°F O.A. TEMP, 70°F D.B. & 60°F W.B., MCA=13, 208/230/1/60. UNIT TO BE COMPLETE WITH CRANKCASE HEATER, AMBIENT CONTROL KIT TO 0°F, AND ALL CONTROLS FOR AUTOMATIC OPERATION. CONTRACTOR TO PROVIDE A ROOF CURB 18" ABOVE FINISHED ROOF LEVEL.
UNIT DIM: 31 1/2" LENGTH X 23 5/8" X HEIGHT X 11 3/16" WIDTH.
WEIGHT: 91 LBS.
MANUFACTURER: MITSUBISHI, OR LG
MODEL: PUZ-A18NHA4

AC-2

INDOOR UNIT: HEAT PUMP, WALL MOUNTED, HORIZONTAL DISCHARGE, 320-370-425CFM, 8,000-18,000 BTUH TOTAL COOLING CAPACITY AT 95°F O.A. TEMP, 80°F D.B. & 67°F W.B., 8,000-20,000 BTUH TOTAL HEATING CAPACITY AT 47°F O.A. TEMP, 70°F D.B. & 60°F W.B. MCA=1.0, 208/230/1/60 MOTOR TO BE UL LISTED. UNIT TO BE COMPLETE WITH CLEANABLE FILTER, INTEGRAL CONDENSATE PUMP, CHECK & EXPANSION VALVE KIT, PRE-CHARGED LINE SET, DRIP PAN AND DRAIN CONNECTION. PROVIDE WALL MOUNTED THERMOSTAT WITH NIGHT SET BACK. THERMOSTAT SHALL BE HARD WIRED TO UNIT.
UNIT DIM: 35 3/8" LENGTH X 11 5/8" HEIGHT X 9 13/16" DEPTH.
WEIGHT: 29 LBS.
SEER : 15.3
MANUFACTURER: MITSUBISHI, OR LG
MODEL: PKA-A18HA4

OUTDOOR UNIT: AIR COOLED, HORIZONTAL DISCHARGE, INVERTER COMPRESSOR, UNIT TO BE MOUNTED ON ROOF. 8,000-18,000 BTUH TOTAL COOLING CAPACITY AT 95°F O.A. TEMP, 80°F D.B. & 67°F W.B., 8,000-20,000 BTUH TOTAL HEATING CAPACITY AT 47°F O.A. TEMP, 70°F D.B. & 60°F W.B., MCA=13, 208/230/1/60. UNIT TO BE COMPLETE WITH CRANKCASE HEATER, AMBIENT CONTROL KIT TO 0°F, AND ALL CONTROLS FOR AUTOMATIC OPERATION. CONTRACTOR TO PROVIDE A ROOF CURB 18" ABOVE FINISHED ROOF LEVEL.
UNIT DIM: 31 1/2" LENGTH X 23 5/8" X HEIGHT X 11 3/16" WIDTH.
WEIGHT: 91 LBS.
MANUFACTURER: MITSUBISHI, OR LG
MODEL: PUZ-A18NHA4

ET-1

EXPANSION TANK: BLADDER TYPE, HEATER WATER. 158 GALLONS TOTAL VOLUME FACTORY AIR CHARGE 12 PSI, 30"Ø X 71-7/8" HIGH. COMPLETE WITH DRAIN COCK, ASME CONSTRUCTION, STEEL SHELL AND HEAVY DUTY BUTYL DIAPHRAGM.
MANUFACTURER: ITT BELL & GOSSETT
MODEL: B-600

AS-1

AIR SEPARATION TANK: HEATING WATER, IN-LINE AMTROL, 700 GPM MAXIMUM CAPACITY, 6" WATER INLET AND OUTLET, 6" AIR OUTLET WITH AUTOMATIC AIR VENT SIMILAR TO ARMSTRONG NO. 1-AV.
MANUFACTURER: BELL & GOSSETT MODEL: R-6

AS-2

AIR SEPARATION TANK: HEATING WATER, IN-LINE AMTROL, 700 GPM MAXIMUM CAPACITY, 6" WATER INLET AND OUTLET, 6" AIR OUTLET WITH AUTOMATIC AIR VENT SIMILAR TO ARMSTRONG NO. 1-AV.
MANUFACTURER: BELL & GOSSETT MODEL: R-6

GF-1

GLYCOL FEED TANK: SEE SPECIFICATIONS. 120/1/60 POWER REQUIRED.

CTF-1

COOLING TOWER BY-PASS FILTER: 100 GPM @ 35 FT. , WATER, 2 H.P., 460/3/60, 2.7 FLA, TO BE COMPLETE PACKAGED SYSTEM WITH PUMP, SEPARATOR & CONTROL W/ PANEL. STAINLESS STEEL CONSTRUCTION, INLET / OUTLET VALVES & (3) SPARE FILTER BAGS. DIMENSIONS: 39-3/4" W x 48" D x 33-1/8" H
MODEL: LAKOS, SPX-0100-SVR

DB-1

DRYER BOX: PACKAGED DRYER BOX FLUSH MOUNTED, 22 GAUGE PAINTED ALUMINUM.
MODEL: DRYERBOX 480

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11/8/2023
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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL SCHEDULES

M501

11/8/2023 4:59:10 PM

GAS UNIT HEATER

SYMBOL	LOCATION	CFM	GAS - HEATING CAPACITY		VENT / INTAKE	POWER	MAKE & MODEL	NOTES
			GAS MBH INPUT	GAS MBH OUTPUT				
GUH-1	MECHANICAL ROOM	769	60.0	49.8	4"	115/1/60 MOCP 15 AMPS	REZNOR -UDZ- 060	1-3

NOTES:
1. TWO STAGE COMBINATION GAS VALVE.
2. VERTICAL VENT/COMBUSTION TERMINAITION KIT.
3. TWO-STAGE THERMOSTAT.

ELECTRIC UNIT HEATER

SYMBOL	LOCATION	MOUNTING	CFM	KW	AMPS	POWER	MAKE & MODEL	NOTES
EUH-1	STAIR STORAGE	WALL MTD.	380	5.0	6.3	480/3/60	CHROMALOX HVH-05-43-30	1

NOTES:
1. PROVIDE MOUNTING BRACKET, DISCONNECT, SUMMER FAN SWITCH AND THERMOSTAT.

HEATING HOT WATER UNIT HEATER

SYMBOL	LOCATION	TYPE	MOUNTING	CFM	HEATING M.B.H	HEATING COIL GPM	HEATING COIL W.P.D.	H.P.	POWER	MAKE & MODEL	NOTES
UH-1	OUTDOOR STORAGE	HORIZONTAL	WALL MTD.	420	8.9	1.9	2.2	9 WATT	120/1/60	AIRTHERM HA-118A	1,2

NOTES:
1. UNIT HEATER SHALL BE COMPLETE WITH 4-WAY OUTLET LOUVER
2. CAPACITIES BASED ON 140 DEG. F. EWT AND 60 DEG. F. EAT, 30% PG SOLUTION.

VENTILATION FAN SCHEDULE

SYMBOL	LOCATION	CFM	S.P	DRIVE	H.P.	POWER	MAKE & MODEL	NOTES
VF-1	SIDEWALL MECHANICAL ROOM	1000	.25"	DIRECT	1/8"	120/1/60	PENN P16T	1,2,3,4,5

NOTES:
1. FAN TO BE CONTROLLED WITH WALL MOUNTED THERMOSTAT.
2. PROVIDE MOTORIZED DAMPER. (INTERLOCK TO OPEN WITH FAN OPERATION)
3. PROVIDE OSHA FAN GUARD.
4. INLET CONFIGURATION -- SEE DETAIL 1/M504.
5. FAN IS A SUPPLY AIR FAN TO BOILER RM.

FINNED TUBE RADIATION SCHEDULE

SYMBOL	ENCLOSURE HEIGHT	ACTIVE LENGTH	ROWS	FIN SIZE	FIN/FT	TUBE SIZE	CAPACITY BTUH/FT	HEATING M.B.H	GPM	MAKE & MODEL	NOTES
FT-1	BARE FIN	4'-0"	2	3-1/4"	40	1-1/4"	1220	4.8	1.0	LINOVECTOR	1,2

NOTES:
1. HEATING CAPACITIES BASED ON 140°F EWT & 65°F EAT WITH 30% PROPYLENE GLYCOL SOLUTION.
2. BARE FIN ELEMENT ABOVE CEILING OF VESTIBULES.

PENTHOUSE SCHEDULE

SYMBOL	SERVES	CFM	THROAT SIZE		HEIGHT	TYPE	MAKE & MODEL	NOTES
			WIDTH	LENGTH				
PH-1	AHU-1	40,000	150"	78"	48"	OUTSIDE AIR	AIR-RITE	1-5
PH-2	AHU-1	40,000	82"	48"	48"	RELEIF	AIR-RITE	1-3,6
PH-3	AHU-3	40,500	150"	78"	48"	OUTSIDE AIR	AIR-RITE	1-5
PH-4	AHU-3	40,500	82"	48"	48"	RELEIF	AIR-RITE	1-3,6
PH-5	AHU-4	6,205	40"	44"	24"	OUTSIDE AIR	AIR-RITE	1-5
PH-6	AHU-2	16,000	60"	78"	36"	OUTSIDE AIR	AIR-RITE	1-5
PH-7	BOILER ROOM	1,000	26"	26"	24"	RELEIF	AIR-RITE	1-3,6,7

NOTES:
1. COMPLETE WITH 18" HIGH CURB (14 GA.) WITH WOOD NAILER. SEE PLANS FOR ROOF OPENING LOCATIONS.
2. UNIT TO BE COMPLETE WITH BIRDSCREEN.
3. KYNAR COLOR FINISH TO BE SELECTED BY ARCHITECT.
4. PENTHOUSE UNITS MUST BE REINFORCED TO WITHSTAND 120 MPH WIND VELOCITIES AND 30 PSF SNOW.
5. FACE VELOCITIES SHALL NOT EXCEED 500 F.P.M.
6. FACE VELOCITIES SHALL NOT EXCEED 1200 F.P.M.
7. INTERLOCK MOTORIZED DAMPER WITH VF-1.

LOUVER SCHEDULE

SYMBOL	TYPE	SIZE	LOCATION	MAKE & MODEL	NOTES
L-1	INTAKE	36"x24"	BOILER ROOM	AIROLITE 609A	1,2,3
L-2	INTAKE	28"x24"	ELEC. ROOM	AIROLITE 609A	1,2,3
L-3	RELEIF	48"x48"	MECHANICAL FAN ROOM	AIROLITE 609A	1,2,3
L-4	RELIEF	64"x64"	MECHANICAL FAN ROOM	AIROLITE 609A	1,2,3

NOTES:
1. PROVIDE 1/2" MESH BRONZE BIRDSCREEN.
2. COORDINATE EXACT MOUNTING APPLICATIONS & LOCATIONS WITH ARCHITECTURAL ELEVATIONS.
3. LOUVERS SHALL BE 1 PIECE CONSTRUCTION.

LINEAR DIFFUSER SCHEDULE

SYMBOL	NUMBER OF SLOTS / SLOT SIZE	INLET SIZE	AIR PATTERN	MAKE & MODEL	NOTES
LD-1	2 / 1.5"	8"ø	ADJUSTABLE	PRICE - SDS W/ SDB	1-6
LD-2	3 / 1.5"	10"ø	ADJUSTABLE	PRICE - SDS W/ SDB	1-6

NOTES:
1. COLOR & FINISH TO MATCH CEILING GRID. COORDINATE WITH ARCHITECT.
2. INTERIOR DEFLECTOR OF DIFFUSER SHALL BE FLAT BLACK.
3. MAXIMUM NC OF 22 AT DESIGN CFM.
4. ALL LINEAR DIFFUSERS MUST BE SUPPORTED FROM OVERHEAD CONSTRUCTION INDEPENDENT OF CEILING WITH AT LEAST 2-WIRES.
5. PROVIDE OOB WITH DIFFUSER.
6. PROVIDE WITH SHEET METAL PLENUM.

REHEAT BOX SCHEDULE

SYMBOL	CFM RANGE	% MIN. CFM	INLET SIZE	A.P.D.	% HEAT CFM	HEATING M.B.H	HEATING COIL GPM	HC BRANCH PIPE SIZE	E.W.T.	MIN. ROWS	W.P.D.	MAKE & MODEL	NOTES
RB-1	250-400	30	6"	0.21"	60	8.0	1.75	3/4"	140	2	0.57 FT	PRICE SDV	1-5
RB-2	400-800	30	8"	0.56"	60	18.0	6.0	1"	140	2	0.84 FT	PRICE SDV	1-5
RB-3	850-1150	30	10"	0.54"	60	24.0	6.5	1"	140	2	6.4 FT	PRICE SDV	1-5
RB-4	1150-1800	30	12"	0.63"	60	35.0	7.0	1"	140	2	12.60 FT	PRICE SDV	1-5

NOTES:
1. VAV AND COIL CONTROL SHALL BE ACCESSED FROM SAME SIDE OF BOX. SEE PLAN FOR RIGHT OR LEFT HAND COIL CONNECTIONS. COORDINATE WITH INSTALLING CONTRACTOR.
2. CAPACITIES BASED ON 55 DEG.F. ENTERING AIR TEMP., 140 DEG.F. ENTERING WATER TEMP WITH 20 DEG.F. WATER TEMP. DROP. & 30% PROPYLENE GLYCOL SOLUTION
3. COORDINATE CONTROL MOUNTING WITH ATC CONTRACTOR.
4. MINIMUM CFM SHALL BE SET FOR 30 PERCENT OF THE TOTAL CFM FOR EACH VAV BOX.
5. MAXIMUM HEATING CFM SHALL BE SET FOR 60 PERCENT OF THE TOTAL CFM FOR EACH VAV BOX.

EXHAUST FAN SCHEDULE

SYMBOL	LOCATION	TYPE	CFM	E.S.P	MOTOR	DRIVE	UNIT WTS. LBS	MAKE & MODEL	NOTES
EF-1	KITCHEN HOOD	ROOF	4050	1.5"	2 HP 460/3/60	BELT	263	TCF - BCRUR - 210B	1
EF-2	KITCHEN DISHWASHER	ROOF	900	900	1/4 HP 115/1/60	DIRECT	119	TCF - VCU -140	2
EF-3	AREA 13 TOILET ROOM	ROOF	150	.35"	1/8 HP 115/1/60	DIRECT	61	TCF -VC -083	2
EF-4	AREA 14 & 24 MAIN RESTROOMS	ROOF	1350	.5"	1/4 HP 115/1/60	BELT	178	TCF - BCRD - 140D	2
EF-5	AREA 14 MAIN RESTOOM	ROOF	375	.4"	1/15 HP 115/1/60	DIRECT	39	TCF - VC - 112	2
EF-6	AREA 23 RESTOOM	ROOF	675	.5"	1/4 HP 115/1/60	DIRECT	71	TCF - VC - 120	2
EF-7	AREA 13 RESTROOMS	ROOF	350	.5"	1/15 HP 115/1/60	DIRECT	39	TCF - VC - 112	2
EF-8	KITCHEN TOILET ROOM	CEILING	75	.25"	1/8 HP 115/1/60	DIRECT	23	TCF - T - 100V	3
EF-9	AREA 13 RESTROOMS	ROOF	150	.35"	1/8 HP 115/1/60	DIRECT	61	TCF - VC - 083	2
EF-10	AREA 21 FAMILY TOILET	CEILING	75	.25"	1/8 HP 115/1/60	DIRECT	23	TCF - T - 100V	3
EF-11	ELEVATOR MACHINE ROOM	ROOF	750	.5"	1/4 HP 115/1/60	DIRECT	119	TCF - VCU -140	2
EF-12	AREA 11 ADMIN. RESTOOMS	ROOF	225	.5"	1/8 HP 115/1/60	DIRECT	71	TCF - VC - 098	2
EF-13	AREA 11 ADMIN. MAIN RESTROOMS	ROOF	600	.5	1/8 HP 115/1/60	DIRECT	70	TCF - VC - 120	2
EF-14	FACULTY LOUNGE	CEILING	250	.25"	1/3 HP 115/1/60	DIRECT	23	TCF - T - 300V	3,4
EF-15	MAIN ELECTRICAL ROOM	ROOF	700	.25"	1/8 HP 115/1/60	DIRECT	68	TCF - VC - 120	2,6
EF-16	KITCHEN TOILET ROOM	CEILING	100	.25"	1/4 HP 115/1/60	DIRECT	23	TCF - T	3
EF-17	ELECTRICAL ROOM	CEILING	350	.20"	1/4 HP 115/1/60	DIRECT	34	TCF - T - 400H	3,6
EF-18	ELECTRICAL ROOM	CEILING	350	.20"	1/4 HP 115/1/60	DIRECT	34	TCF - T - 400H	3,6
EF-19	AREA 13 RESTROOMS	ROOF	150	.35"	1/8 HP 115/1/60	DIRECT	61	TCF - VC - 083	2

NOTES:
1. PROVIDE 24" FACTORY CURB FACTORY GREASE CUP & FACTORY HINGED INSPECTION CURB WITH STOP.
2. EXHAUST FANS TO BE ROOF-MOUNTED CENTRIFUGAL TYPE, COMPLETE WITH SPUN ALUMINUM HOOD,BIRDSCREEN, DISCONNECT SWITCH UNDER HOOD, PREFAB CURB AND BACKDRAFT DAMPER, EXHAUST FAN SHALL BE COMPLETE WITH 18" HIGH PRE-FAB ROOF CURB.
3. CEILING MOUNTED EXHAUST FANS TO BE COMPLETE WITH SIGHT TIGHT BAR-TYPE CEILING GRILLE, BACKDRAFT DAMPERS AND FLEXIBLE CONNECTION ON DISCHARGE DUCT.
4. PROVIDE LINE VOLTAGE 0-2 HR WALL SWITCH. ATC TO PROVIDE.
5. INTERLOCK FAN WITH CLOTHS DRYER.
6. FAN TO OPERATE ON COOLING THERMOSTAT.

DIFFUSER SCHEDULE

SYMBOL	TYPE	SIZE	LOCATION	AIR PATTERN	MAKE & MODEL	NOTES
D-1	SUPPLY	6"ø	CEILING	4-WAY	PRICE - SPD	1-3
D-2	SUPPLY	8"ø	CEILING	4-WAY	PRICE - SPD	1-3
D-3	SUPPLY	10"ø	CEILING	4-WAY	PRICE - SPD	1-3
D-4	SUPPLY	12"ø	CEILING	4-WAY	PRICE - SPD	1-3
D-6	SUPPLY	36"x6"	DUCT MTD.	ADJUSTABLE	PRICE - HCD	3-5
D-7	SUPPLY	8"ø	GYP. CEILING	4-WAY	PRICE - SPD - 20x20	1-3
D-8	SUPPLY	4"ø	CEILING	4-WAY	PRICE - SPD - 12x12	1-3

NOTES:
1. DIFFUSER SUPPLIER SHALL COORDINATE W/ REFLECTED CEILING PLANS TO DETERMINE TYPE OF FRAMES.
2. COLOR & FINISH TO MATCH CEILING GRID. COORDINATE WITH ARCHITECT.
3. CONTRACTOR TO VERIFY EXACT HEIGHT & LOCATION OF EXPOSED DIFFUSERS WITH ARCHITECT.
4. PROVIDE OPPOSED BLADE BALANCING DAMPER.
5. PROVIDE WITH SPIRAL DUCT MOUNTING FRAME.

GRILLES SCHEDULE

SYMBOL	TYPE	SIZE	LOCATION	MAKE & MODEL	NOTES
G-1	RETURN	24"x24"	CEILING	PRICE - 530	1
G-2	RETURN	24"x12"	CEILING	PRICE - 530	1
G-3	RETURN	16"x36"	LOW SIDEWALL	PRICE - 93	2
G-5	RETURN	48"x48"	LOW SIDEWALL	PRICE - 93	2
G-6	RETURN	24"x16"	SIDEWALL	PRICE - 530D	2
G-7	RETURN	32"x16"	SIDEWALL	PRICE - 530D	2

NOTES:
1. COLOR AND FINISH TO MATCH CEILING GRID, COORDINATE WITH ARCHITECT. SUPPLIER OF REGISTERS AND GRILLES SHALL COORDINATE WITH REFLECTED CEILING PLANS TO DETERMINE PROPER FRAMES.
2. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.

REGISTER SCHEDULE

SYMBOL	TYPE	SIZE	LOCATION	MAKE & MODEL	NOTES
R-1	EXHAUST	8"x8"	CEILING	PRICE - 530D	1-3
R-2	EXHAUST	10"x10"	CEILING	PRICE - 530D	1-3

NOTES:
1. COLOR AND FINISH TO MATCH CEILING GRID, COORDINATE WITH ARCHITECT. SUPPLIER OF REGISTERS AND GRILLES SHALL COORDINATE WITH REFLECTED CEILING PLANS TO DETERMINE PROPER FRAMES.
2. ALL REGISTERS TO BE C/W OPPOSED BLADE VOLUME CONTROL DAMPER.
3. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

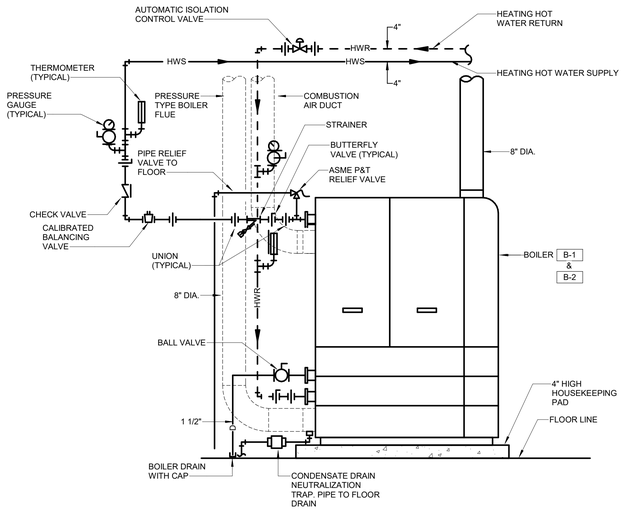
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL SCHEDULES

M502

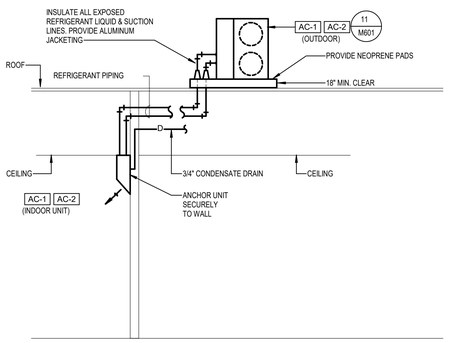
11/6/2023 5:10:41 PM



HEATING HOT WATER BOILER DETAIL

SCALE: NTS

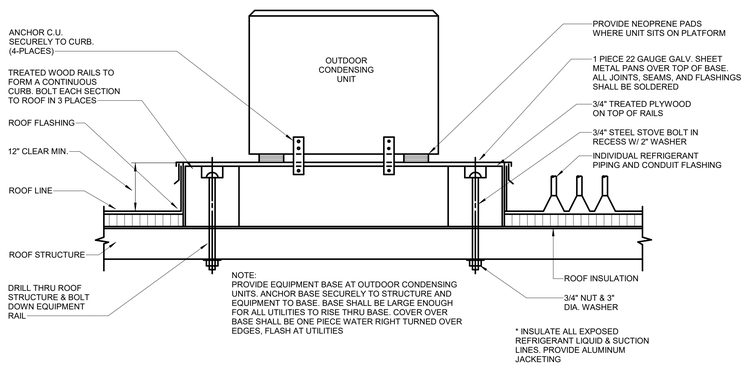
9 / M601



ROOM AC UNIT DETAIL

SCALE: NTS

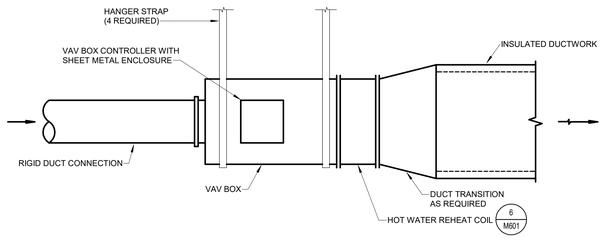
10 / M601



AC OUTDOOR UNIT DETAIL

SCALE: NTS

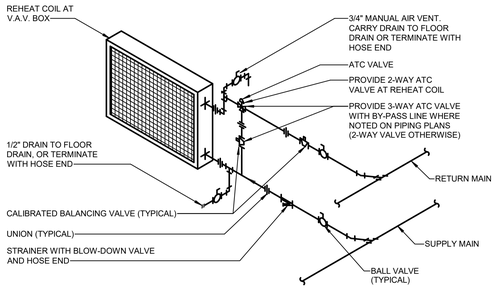
11 / M601



VAV REHEAT BOX DETAIL

SCALE: NTS

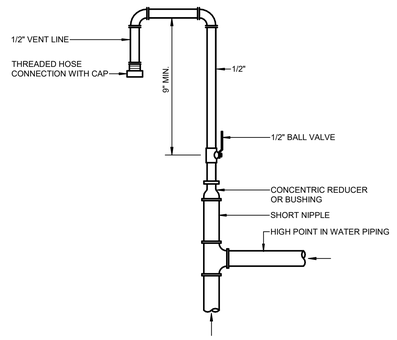
5 / M601



REHEAT COIL PIPING DETAIL

SCALE: NTS

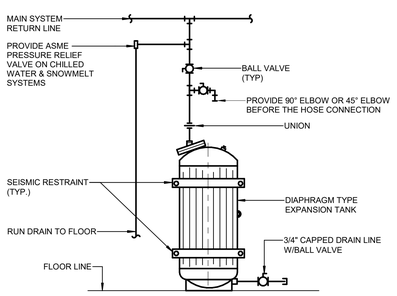
6 / M601



MANUAL AIR VENT DETAIL

SCALE: NTS

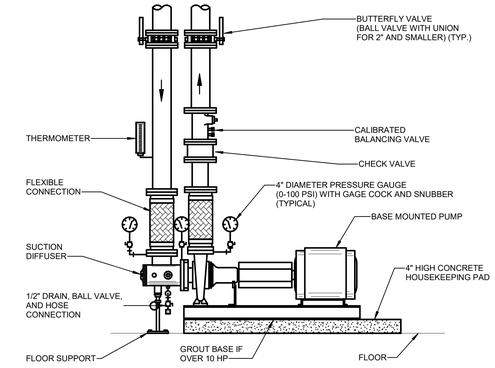
7 / M601



EXPANSION TANK PIPING DETAIL

SCALE: NTS

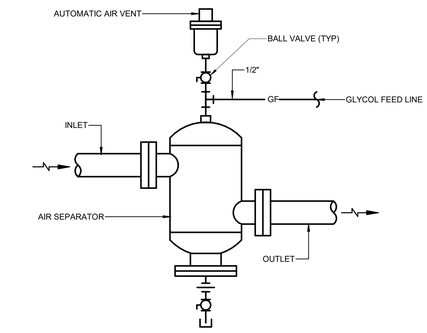
8 / M601



BASE MOUNTED PUMP DETAIL

SCALE: NTS

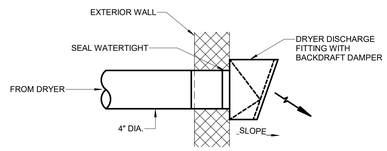
1 / M601



AIR SEPARATOR DETAIL

SCALE: NTS

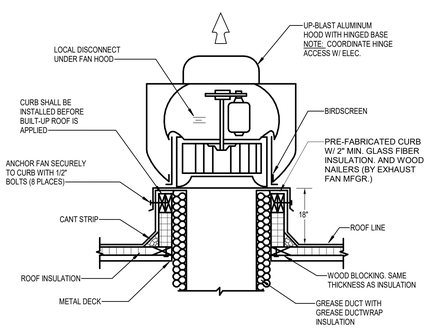
2 / M601



TYPICAL DRYER DUCT TERMINATION AT WALL DETAIL

SCALE: NTS

3 / M601



KITCHEN HOOD ROOF MOUNTED EXHAUST FAN

SCALE: NTS

4 / M601

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

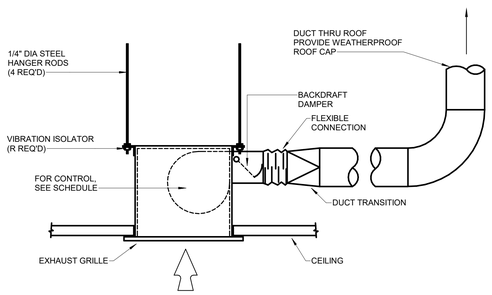
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL DETAILS

M601

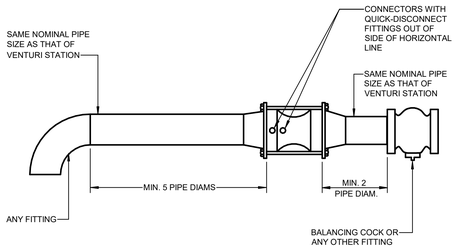
11/6/2023 4:59:21 PM



CEILING EXHAUST FAN DETAIL

SCALE: NTS

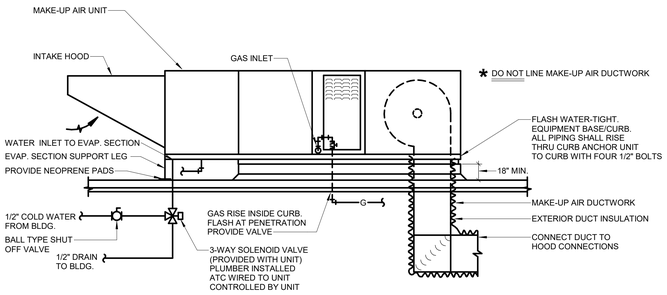
9 / M602



FLOW VENTURI DETAIL

SCALE: NTS

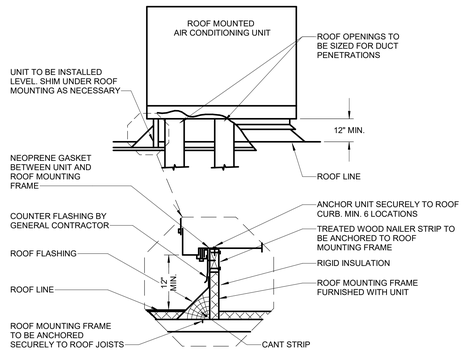
5 / M602



MAKE-UP AIR UNIT DETAIL

SCALE: NTS

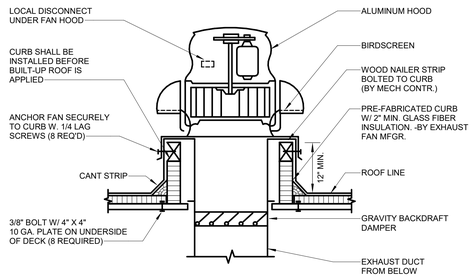
1 / M602



ROOF MOUNTED AIR CONDITIONING UNIT DETAIL

SCALE: NTS

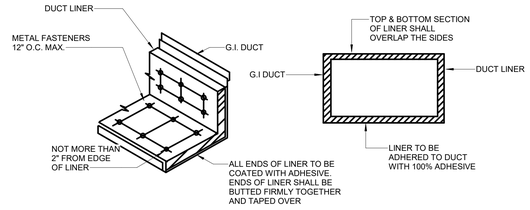
10 / M602



ROOF MOUNTED EXHAUST FAN DETAIL

SCALE: NTS

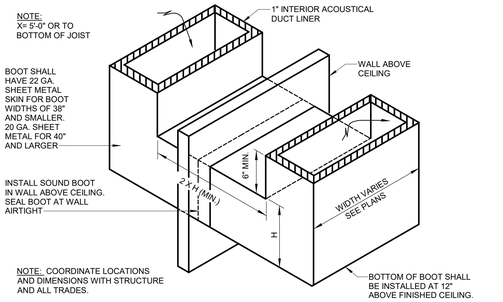
6 / M602



DUCT LINER DETAIL

SCALE: NTS

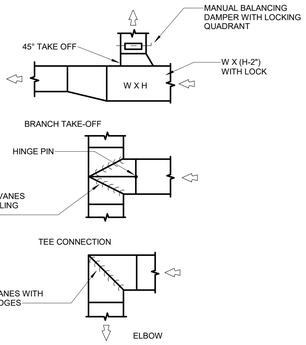
2 / M602



RETURN AIR TRANSFER SOUND BOOT DETAIL

SCALE: NTS

11 / M602



LOW PRESSURE DUCT DETAIL

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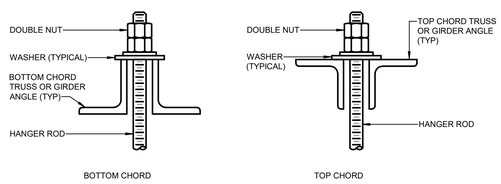
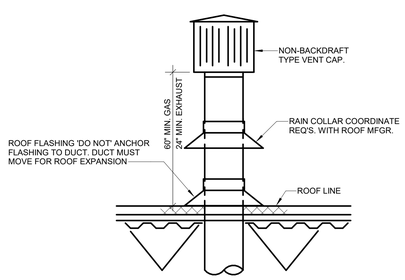
7 / M602



PIPING OR EQUIPMENT HANGER ATTACHMENT TO TRUSS OR GIRDER

SCALE: NTS

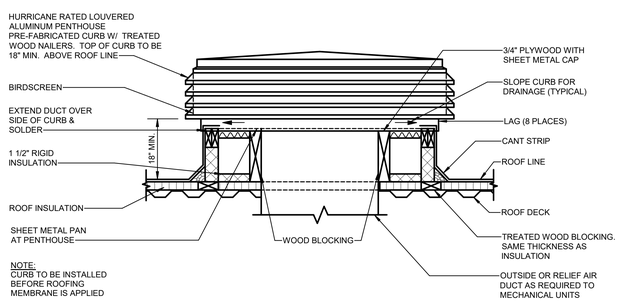
3 / M602



TYPICAL DUCT PENETRATION AT ROOF DETAIL

SCALE: NTS

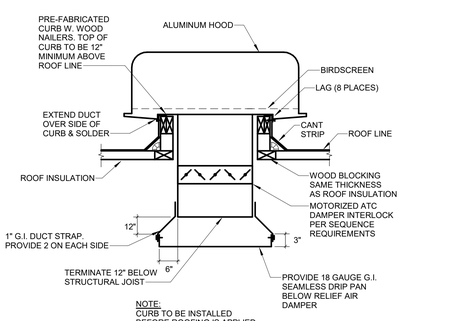
12 / M602



ROOF PENTHOUSE DETAIL

SCALE: NTS

8 / M602



ROOF HOOD DETAIL

SCALE: NTS

4 / M602

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

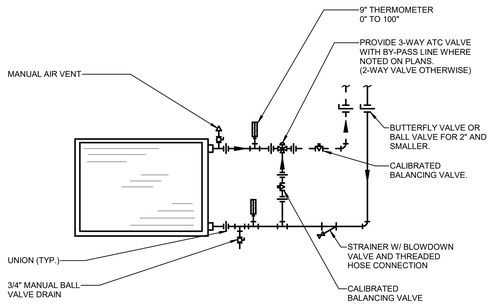
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL DETAILS

M602

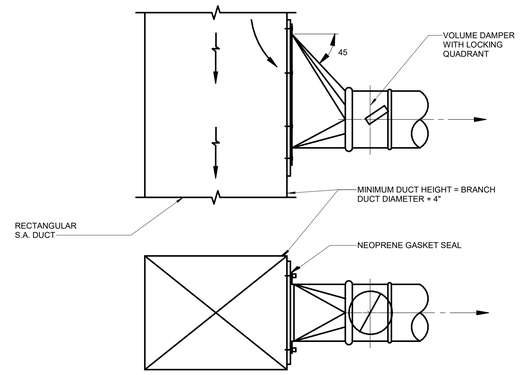
11/8/2023 4:59:23 PM



SINGLE COIL PIPING DETAIL

SCALE: NTS

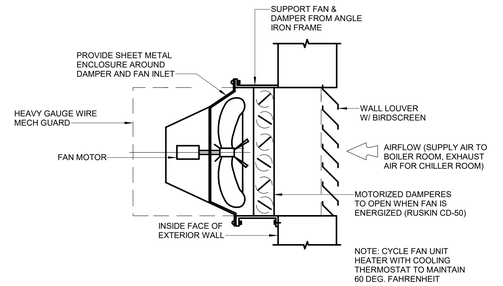
7 / M603



45 DEG. HIGH EFFICIENCY TAKE-OFF

SCALE: NTS

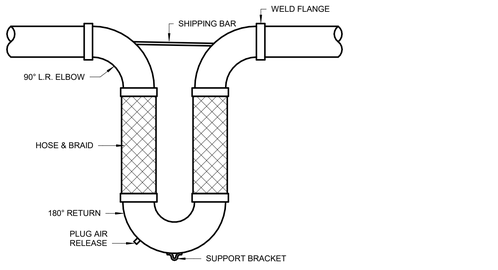
4 / M603



VENTILATION/EXHAUST FAN DETAIL

SCALE: NTS

1 / M603



NOTE:
LOOPS 2" AND LARGER INSTALLED IN ANY ORIENTATION OTHER THAN HANGING DOWN MUST HAVE THE 180° RETURN SUPPORT

SIZE	MVMT	A	B	PSI	WT(LBS)	SPRING FORCE
0.5	+/- 4	9	15.625	1075	5	45
0.75	+/- 4	10	17.875	792	5	47
1	+/- 4	10	18.625	571	7	53
1.25	+/- 4	10.75	20	531	9	66
1.5	+/- 4	11.5	21.25	472	13	70
2	+/- 4	14	24.5	500	16	78
2.5	+/- 4	15.5	28.25	387	26	83
3	+/- 4	18	30	288	39	90
4	+/- 4	24	35.375	232	54	120
5	+/- 4	30	40.25	191	91	186
6	+/- 4	36	45.375	165	140	202
8	+/- 4	48	53.5	212	267	260
10	+/- 4	60	63.25	175	434	283
12	+/- 4	72	72.75	160	586	390

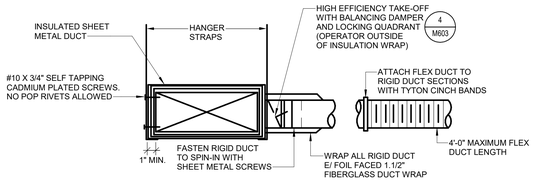
WORKING PRESSURE LISTED IS THE RATING AT 70F

SPRING FORCE: THE TOTAL FORCE (LBS) REQUIRED TO MOVE THE LOOP IT FULL RATED MOVEMENT FOR 150 PSI @ 70F

HEATING WATER EXPANSION LOOP

SCALE: NTS

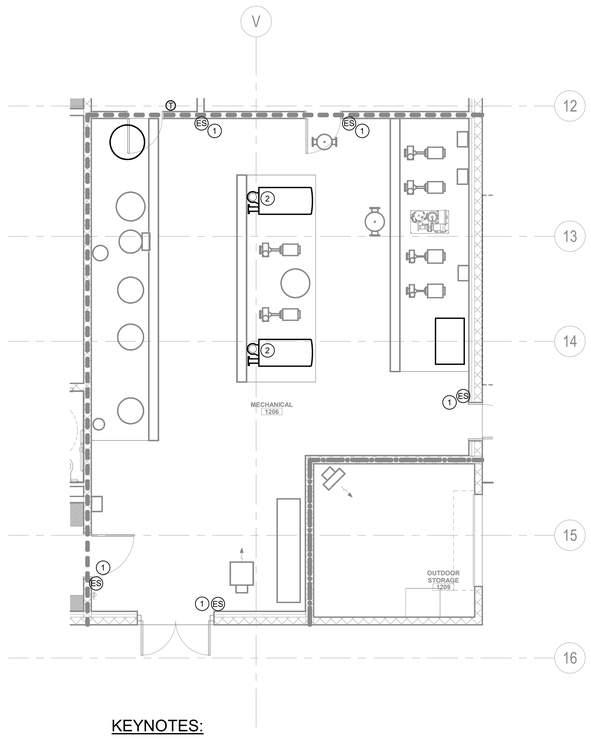
6 / M603



FLEX DUCT H.E.T. FITTING DETAIL

SCALE: NTS

8 / M603



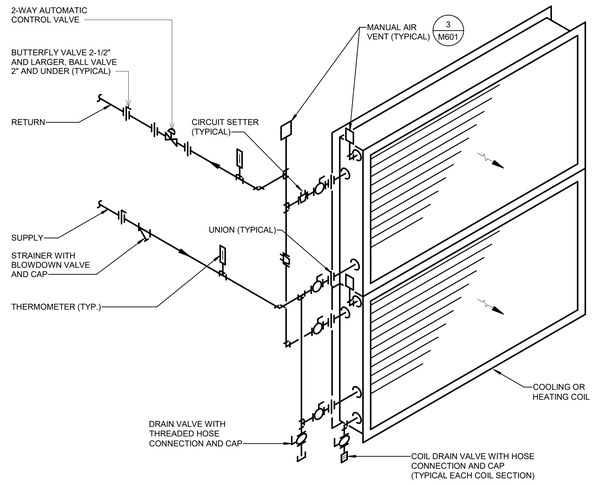
KEYNOTES:

1. PROVIDE PALM OR MUSHROOM TYPE, SINGLE ACTION SHUTDOWN SWITCH WITH MANUAL RESET. SWITCH WHEN ACTIVATED SHALL CUT POWER TO BOILER BURNER CONTROLS 'B-1' & 'B-2'. EMERGENCY SWITCH & RESET SHALL BE PREMONITORY LABELED WITH BOLD 1/2" HT. LETTERING (RED PLASTIC W/WHITE ENGRAVING) OR AS REQUIRED BY STATE BOILER INSPECTOR.
2. SHUT-OFF TO BURNER CONTROLS SHALL SHUT-OFF FUEL SUPPLY TO BURNERS UPON LOSS OF POWER OR UPON FAILURE OF DEVICE.

ENLARGED MECHANICAL PLAN

SCALE: NTS

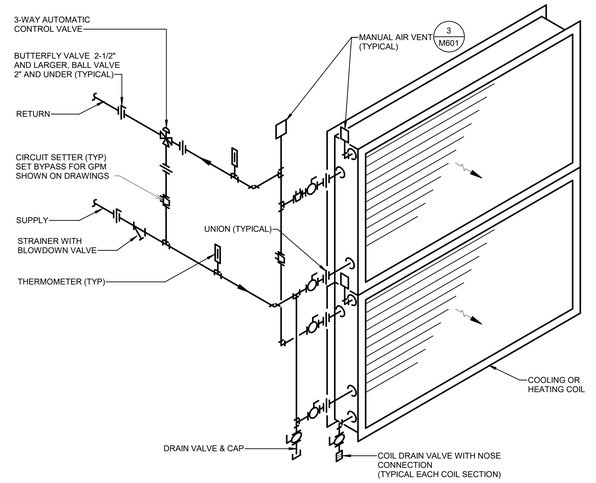
5 / M603



MULTIPLE HEATING OR COOLING PIPING DETAIL (2-WAY)

SCALE: NTS

2 / M603



MULTIPLE HEATING OR COOLING COIL PIPING DETAIL 3-WAY W/ BYPASS

SCALE: NTS

3 / M603

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

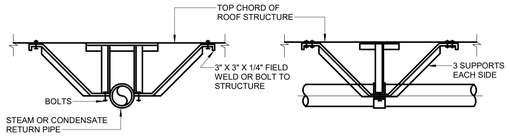
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL DETAILS

M603

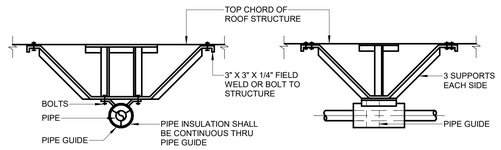
11/6/2023 4:00:26 PM



PIPING ANCHOR DETAIL

SCALE: NTS

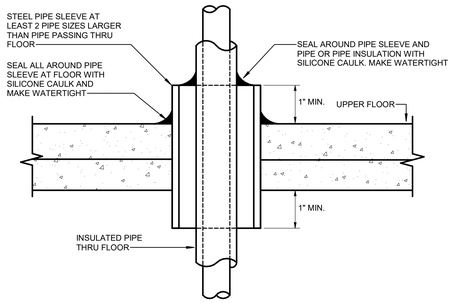
7 / M604



PIPING GUIDE DETAIL

SCALE: NTS

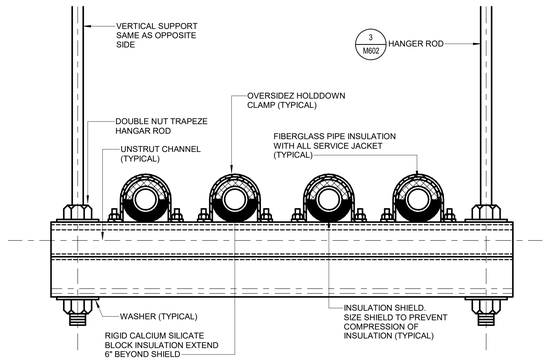
8 / M604



PIPE THRU FLOOR DETAIL

SCALE: NTS

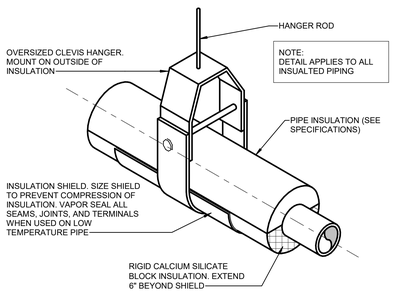
9 / M604



TRAPEZE PIPE SUPPORT DETAIL

SCALE: NTS

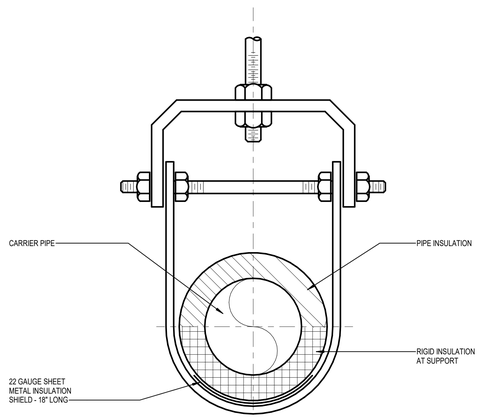
4 / M604



PIPE SUPPORT DETAIL (MECH)

SCALE: NTS

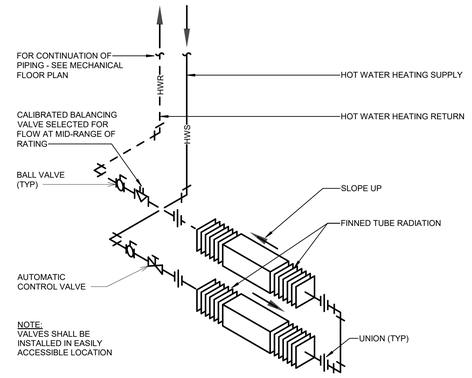
5 / M604



PIPE HANGER DETAIL (MECH)

SCALE: NTS

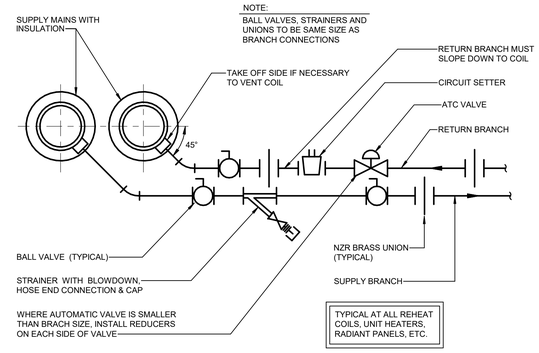
6 / M604



FINNED RADIATION PIPING DETAIL

SCALE: NTS

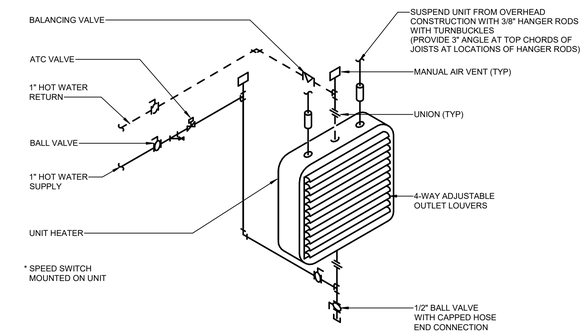
1 / M604



MAIN TO BRANCH PIPING CONNECTION DETAIL

SCALE: NTS

2 / M604



UNIT HEATER PIPING SCHEMATIC

SCALE: NTS

3 / M604

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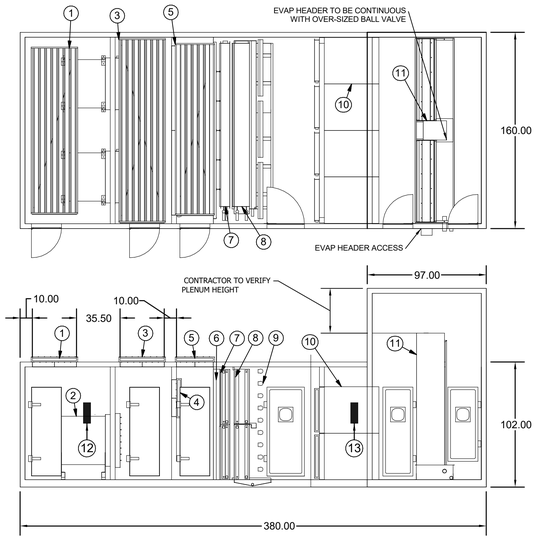
BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL DETAILS

M604

11/8/2023 4:59:28 PM

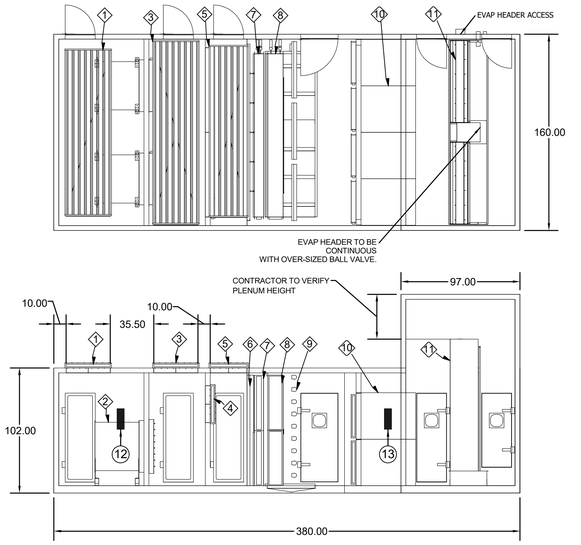


AIR HANDLING UNIT 'AHU-3' DETAIL (3 / M605)

NOT TO SCALE

KEYED NOTES

1. 134" LONG X 36" HIGH RETURN AIR DAMPER
2. RETURN FANS WITH BACKDRAFT DAMPERS
3. 148" LONG X 36" HIGH EXHAUST AIR DAMPER
4. 138" LONG X 30" HIGH RETURN AIR DAMPER
5. 138" LONG X 30" HIGH OUTSIDE AIR DAMPER
6. (18) 24" X 24", (6) 24" X 18" 2" MERV 13 FILTERS
7. HEATING COILS
8. COOLING COILS
9. UV LIGHT- AIRSTREAM WEIGHT
10. SUPPLY FANS BACKDRAFT DAMPERS
11. EVAP SECTION WITH MEDIA
12. RETURN AIR FANS VFD'S MOUNTED ON UNIT.
13. SUPPLY AIR FANS VFD'S MOUNTED ON UNIT.

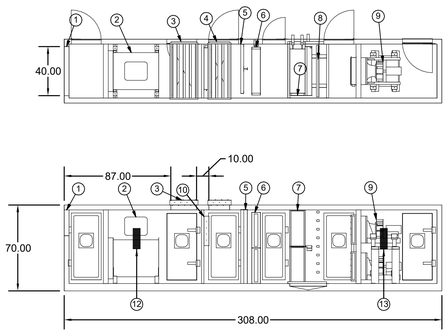


AIR HANDLING UNIT 'AHU-1' DETAIL (1 / M605)

NOT TO SCALE

KEYED NOTES

1. 134" LONG X 36" HIGH RETURN AIR DAMPER
2. RETURN FANS WITH BACKDRAFT DAMPERS
3. 148" LONG X 36" HIGH EXHAUST AIR DAMPER
4. 138" LONG X 30" HIGH RETURN AIR DAMPER
5. 138" LONG X 30" HIGH OUTSIDE AIR DAMPER
6. (18) 24" X 24", (6) 24" X 18" 2" MERV 13 FILTERS
7. HEATING COILS
8. COOLING COILS
9. UV LIGHT- AIRSTREAM WEIGHT
10. SUPPLY FANS BACKDRAFT DAMPERS
11. EVAP SECTION WITH MEDIA
12. RETURN AIR FANS VFD'S MOUNTED ON UNIT.
13. SUPPLY AIR FANS VFD'S MOUNTED ON UNIT.

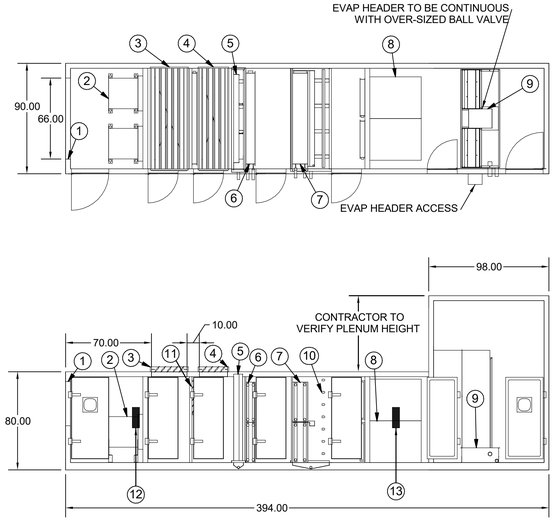


AIR HANDLING UNIT 'AHU-4' DETAIL (4 / M605)

NOT TO SCALE

KEYED NOTES

1. 40" X 21" RETURN AIR OPENING
2. RETURN FANS WITH BACKDRAFT DAMPERS
3. 44" LONG X 21" HIGH EXHAUST AIR DAMPER
4. 44" LONG X 17" HIGH OUTSIDE AIR DAMPER
5. (6) 20" X 20" MERV 13 FILTERS
6. HEATING COILS
7. COOLING COILS
8. UV LIGHT- AIRSTREAM WEIGHT
9. SUPPLY FANS BACKDRAFT DAMPERS
10. RETURN AIR DAMPER
11. RETURN AIR FANS VFD'S MOUNTED ON UNIT.
12. SUPPLY AIR FANS VFD'S MOUNTED ON UNIT.



AIR HANDLING UNIT 'AHU-2' DETAIL (2 / M605)

NOT TO SCALE

KEYED NOTES

1. 66" X 36" RETURN AIR OPENING
2. RETURN FANS WITH BACKDRAFT DAMPERS
3. 82" LONG X 29" HIGH EXHAUST AIR DAMPER
4. 82" LONG X 23" HIGH OUTSIDE AIR DAMPER
5. (9) 24" X 24" MERV 13 FILTERS
6. HEATING COILS
7. COOLING COILS
8. SUPPLY FANS BACKDRAFT DAMPERS
9. EVAP SECTION MEDIA
10. UV LIGHT- AIRSTREAM WEIGHT
11. RETURN AIR DAMPER
12. RETURN AIR FANS VFD'S MOUNTED ON UNIT.
13. SUPPLY AIR FANS VFD'S MOUNTED ON UNIT.

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CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

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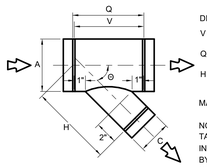
BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL DETAILS

M605

11/6/2023 4:00:29 PM

STRAIGHT LATERAL



DIMENSIONS:

$V = \frac{C}{SIN\ \Theta} + 2$

$Q = \frac{C}{2 \times SIN\ \Theta} + \frac{A}{2 \times TAN\ \Theta} + 1$

$H = \frac{A}{2 \times SIN\ \Theta} + \frac{C}{2 \times TAN\ \Theta} + 2$

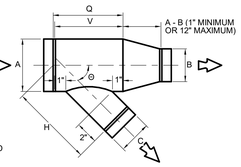
MAXIMUM C = A

NOTE: IF THERE ARE TWO LATERAL TAPS (C & D) BOTH TAPS WILL BE IN LINE ON ONE SIDE AND SEPARATED BY 2 INCHES (PARALLEL TO THE A CENTERLINE)

$V = \frac{C + D}{SIN\ \Theta} + 2$

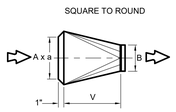
MAXIMUM C OR D = A

EXPANDING STRAIGHT LATERAL



TEES & LATERALS

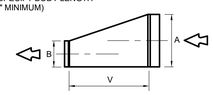
SQUARE TO ROUND



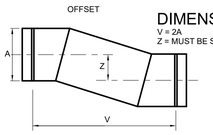
DIMENSIONS:
V = 12, 24, 36, OR 48
A = MAJOR AXIS OF RECTANGULAR SIDE
a = MINOR AXIS OF RECTANGULAR SIDE

ECCENTRIC EXPANDER

DIMENSIONS:
V = SPECIFY BODY LENGTH (4" MINIMUM)



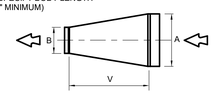
OFFSET



DIMENSIONS:
V = 2A
Z = MUST BE SPECIFIED

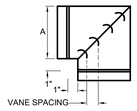
CONCENTRIC EXPANDER

DIMENSIONS:
V = SPECIFY BODY LENGTH (1" MINIMUM)



OFFSETS, REDUCERS AND EXPANDERS

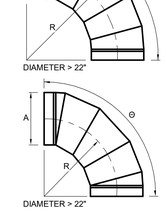
MITERED 90° ELBOW



A (INCHES)	NUMBER OF VANES
3 - 9 1/2	2
10 - 12 1/2	3
13 - 19	4
20 - 60	5
OVER 60	12" MAX. SPACING

NOTE: MITERED ELBOW FITTING TO BE USED WHERE INDICATED ON CONTRACT DRAWINGS.

GORED ELBOW



Θ ANGLE	NUMBER OF GORES
0 - 35°	2
36 - 71°	3
72 - 90°	5

FOR ELBOWS WHERE 0EXCEEDS 90° ADD ONE GORE FOR EACH ADDITIONAL 18° OR FRACTION THEREOF.

DIMENSIONS:
R = 1.5A

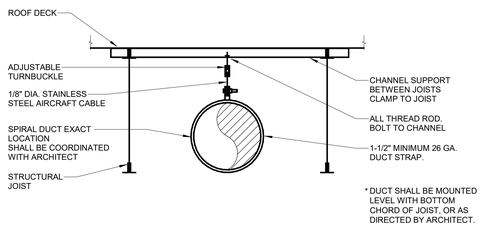
ELBOW

NOTE: DUCT TAPS WILL NOT BE ALLOWED.

SPIRAL DUCT FITTING DETAILS

7 / M606

SCALE: NTS

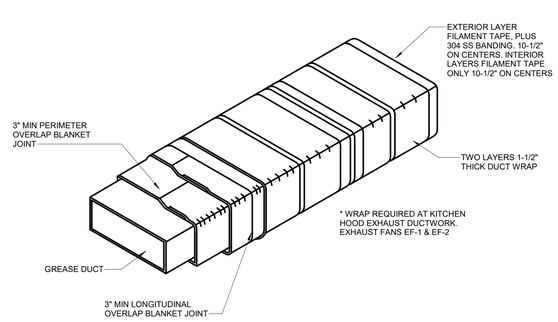


* DUCT SHALL BE MOUNTED LEVEL WITH BOTTOM CHORD OF JOIST, OR AS DIRECTED BY ARCHITECT.

EXPOSED SPIRAL DUCT HANGER DETAIL

8 / M606

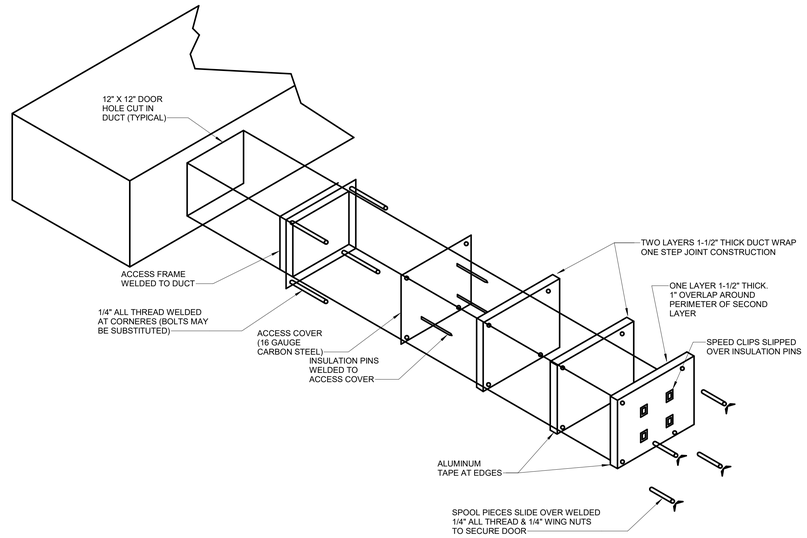
SCALE: NTS



GREASE DUCT WRAP INSTALLATION

4 / M606

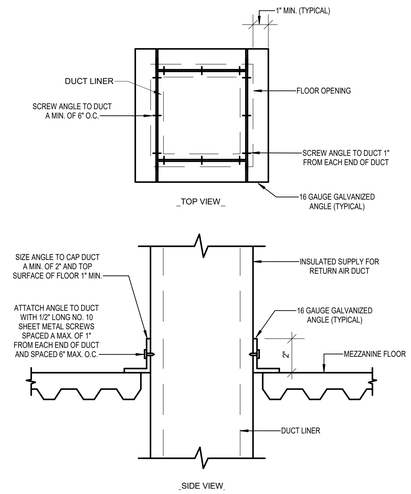
SCALE: NTS



GREASE DUCT ACCESS DOOR INSTALLATION

5 / M606

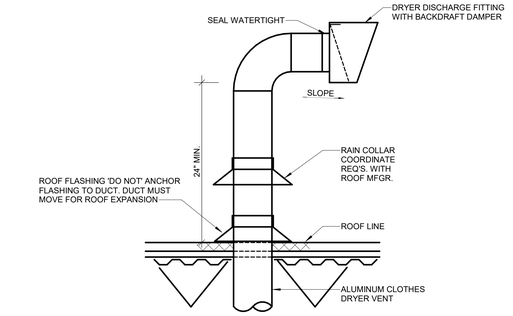
SCALE: NTS



DUCT PENETRATION THRU FLOOR DETAIL

6 / M606

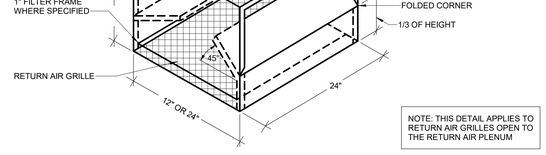
SCALE: NTS



TYPICAL DRYER DUCT TERMINATION AT ROOF DETAIL

1 / M606

SCALE: NTS

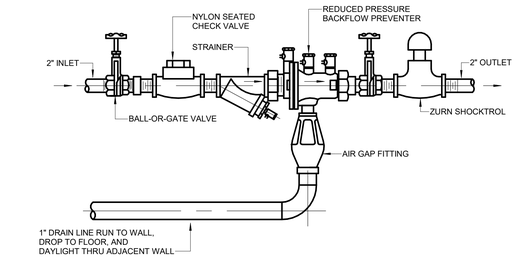


NOTE: THIS DETAIL APPLIES TO RETURN AIR GRILLES OPEN TO THE RETURN AIR PLENUM

RETURN AIR BOOT DETAIL

2 / M606

SCALE: NTS



REDUCED PRESSURE BACKFLOW PREVENTER DETAIL

3 / M606

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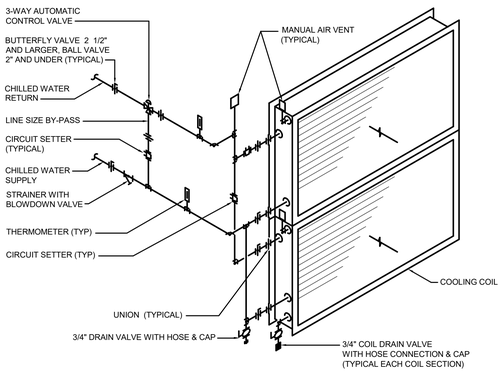
BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL DETAILS

M606

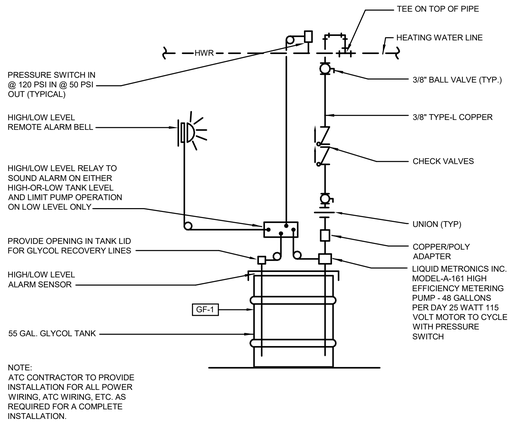
11/8/2023 4:59:31 PM



MANIFOLD PIPING AT INDIRECT COOLING COILS WITH MULTIPLE SECTIONS

NOT TO SCALE

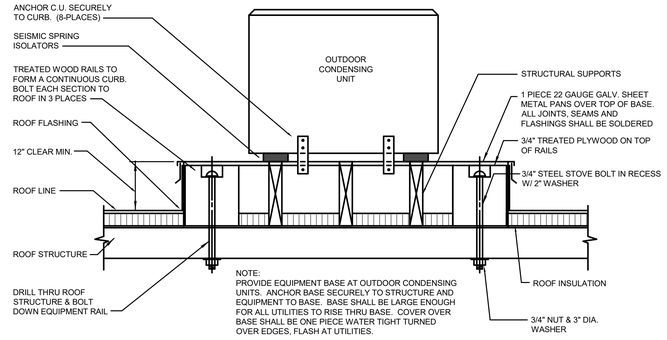
7 / M607



GLYCOL FILL & PRESSURE SYSTEM

NOT TO SCALE

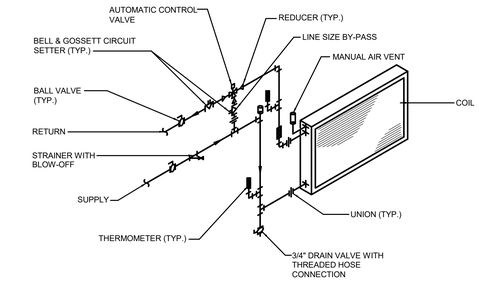
4 / M607



CONDENSING UNIT CU-1 SUPPORT DETAIL

NOT TO SCALE

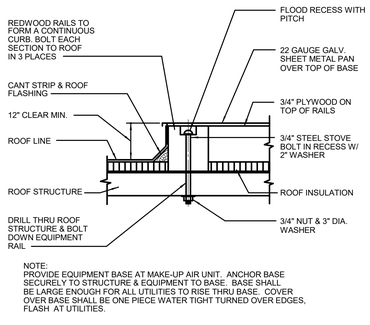
1 / M607



INDIRECT COOLING COIL PIPING DETAIL

NOT TO SCALE

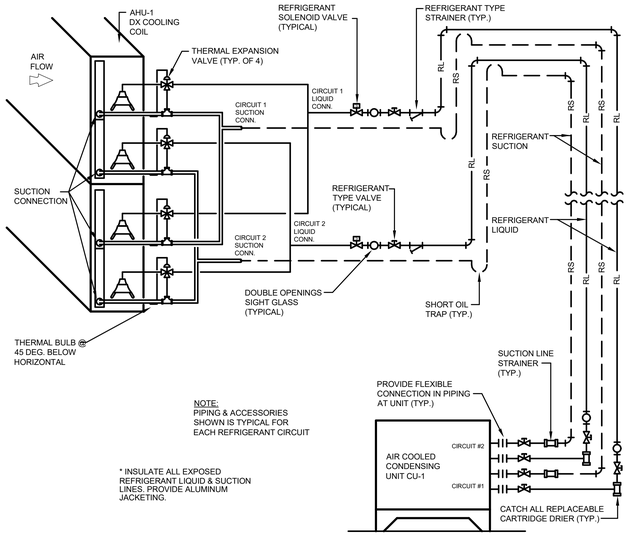
8 / M607



ROOFTOP EQUIPMENT BASE DETAIL

NOT TO SCALE

5 / M607

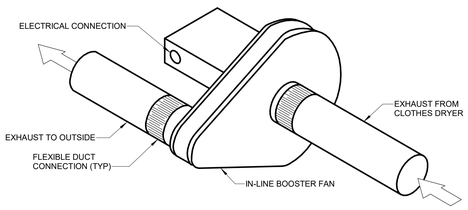


MULTIPLE CIRCUIT REFRIGERANT PIPING DIAGRAM

NOT TO SCALE

* SINGLE CIRCUIT TYPICAL

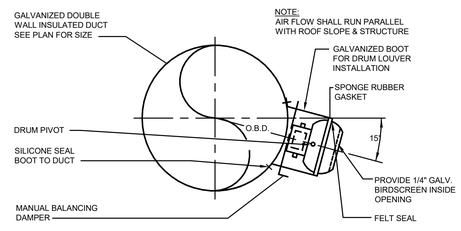
2 / M607



IN-LINE BOOSTER FAN DETAIL

SCALE: NTS

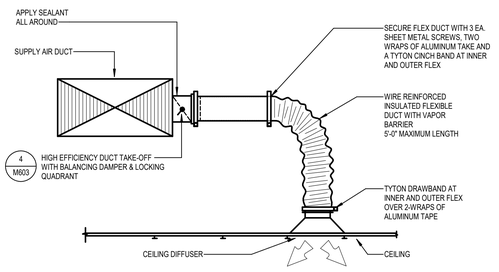
9 / M607



DRUM LOUVER INSTALLATION DETAIL

NOT TO SCALE

6 / M607



CEILING DIFFUSER DETAIL

SCALE: NTS

3 / M607

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DATE: NOVEMBER 08 2023

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MECHANICAL DETAILS

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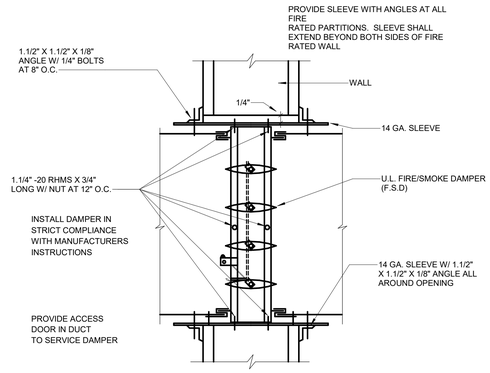
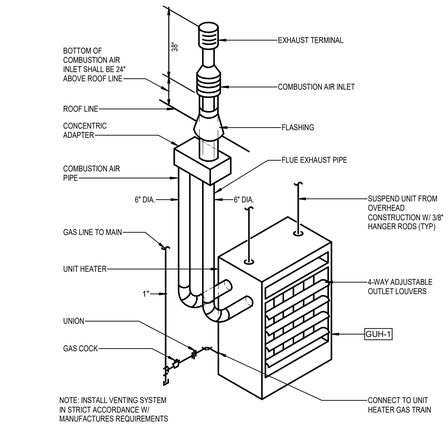


FIRE/SMOKE DAMPER DETAIL

SCALE: NTS

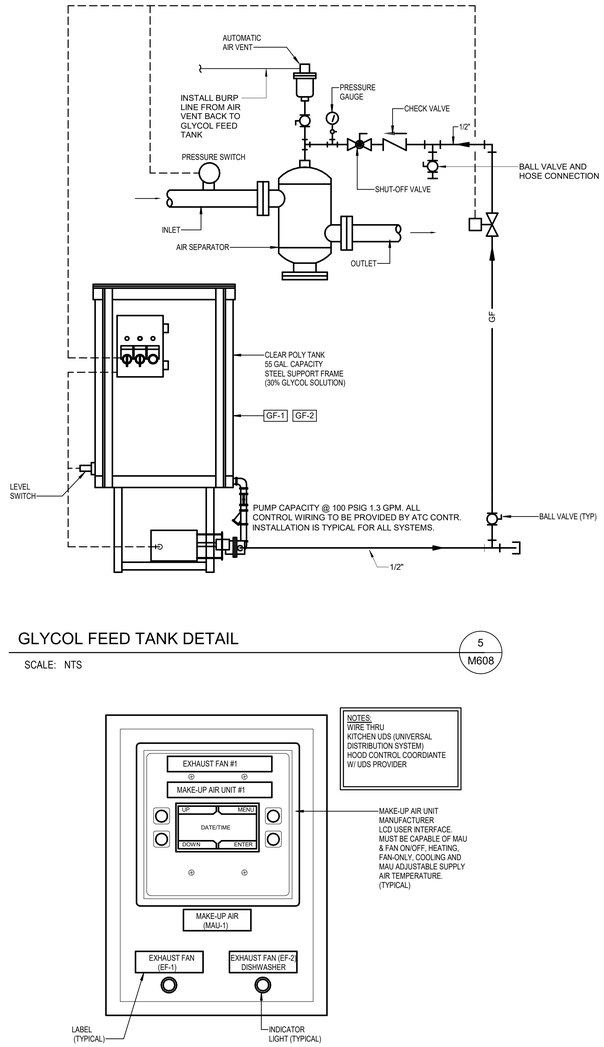
4 M608



GAS FIRED UNIT HEATER PIPING SCHEMATIC

SCALE: NTS

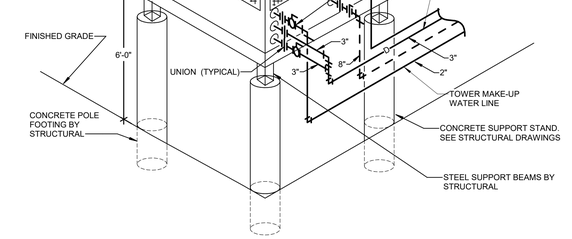
1 M608



GLYCOL FEED TANK DETAIL

SCALE: NTS

5 M608



COOLING TOWER DETAIL

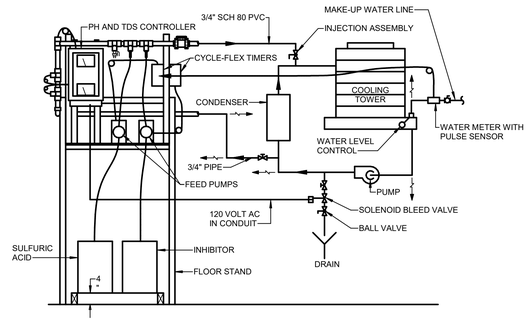
SCALE: NTS

2 M608

MAKE-UP AIR UNIT AND KITCHEN EXHAUST CONTROL PANEL DETAIL

SCALE: NTS

6 M608



CHEMICAL TREATMENT SYSTEM SCHEMATIC

SCALE: NTS

3 M608

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M608

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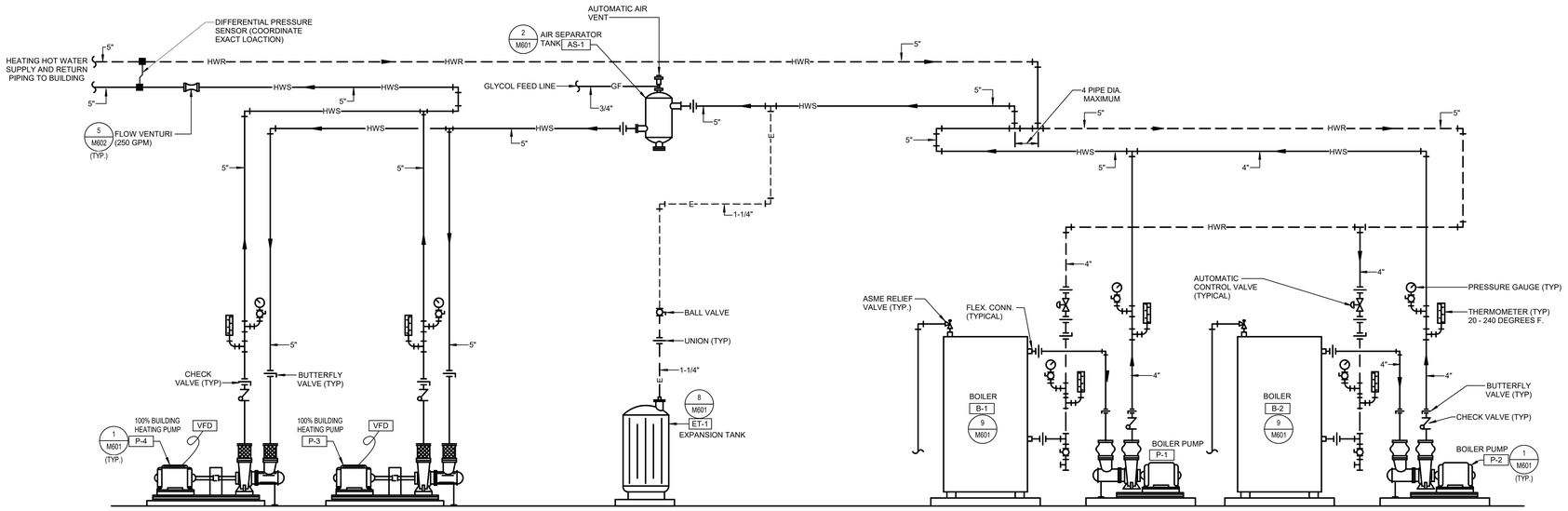

HEATING SYSTEM PIPING SCHEMATIC

SCALE: NTS

1 M609

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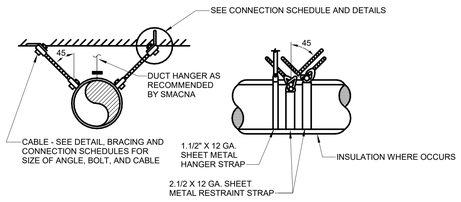
MECHANICAL DETAILS

M609

11/8/2023 4:59:34 PM



CABLE BRACING FOR ROUND DUCTS

SCALE: NTS

4 / M610

PIPE BRACING GENERAL NOTES

1. DETAILS SHOWN PROVIDE GENERAL GUIDELINES FOR A LATERAL BRACING SYSTEM. A TYPICAL VERTICAL SUPPORT SYSTEM MUST ALSO BE USED.
2. BRACE ALL PIPES 1-1/2" I.D. AND LARGER.
3. CABLE RESTRAINTS AND BRACING NOT TO EXCEED 30'-0" CENTERS AND SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION OF PIPE. ALL DROPS TO EQUIPMENT, AND ON EACH SIDE OF FLEXIBLE CONNECTIONS. BRACE POINTS SHALL NOT EXCEED 15'-0" FROM FLEXIBLE CONNECTION.
4. ALL HOLES IN ANGLES AR TO BE 1/16 INCH OVERSIZED. PLACE STANDARD CUT WASHERS BETWEEN SHEET METAL ANGLES AND NUT.
5. EQUIPMENT WHICH ATTACHES TO THE PIPING SYSTEM SHALL BE BRACED INDEPENDENTLY OF PIPES.
6. ALL SHEET METAL FROM BRACING TO BE FY = 33 KSI MINIMUM. GAUGE FOR SHEET METAL BRACING SHALL BE AS FOLLOWS:

   16 GA. = (0.0598 INCH)
   14 GA. = (0.747 INCH)
   12 GA. = (0.1046 INCH)

7. MINIMUM DISTANCE FROM EDGE OF ANGLE TO BOLTS SHALL BE AS FOLLOWS:

   1/4" TO 1/2" DIA. = 1"
   5/8" DIA. = 1-1/8"
   3/4" DIA. = 1-1/4"
   7/8" DIA. = 1-1/2"

8. DO NOT FASTEN RESTRAINT SYSTEM TO TWO DISSIMILAR PARTS OF A BUILDING THAT MAY RESPOND IN A DIFFERENT MODE DURING AN EARTHQUAKE. FOR EXAMPLE, A WALL AND ROOF.
9. PROVIDE LARGE ENOUGH PIPE SLEEVES THROUGH WALLS OR FLOORS TO ALLOW FOR ANTICIPATED DIFFERENTIAL MOVEMENTS.
10. DO NOT FASTEN ONE RIGID PIPING SYSTEM TO TWO DISSIMILAR PARTS OF A BUILDING THAT MAY RESPOND IN A DIFFERENT MODE DURING AN EARTHQUAKE. FOR EXAMPLE, A WALL AND A ROOF.
11. BRACING DETAILS, SCHEDULES AND NOTES ARE TO BE USED WITH THE FOLLOWING TYPES OF PIPE: STEEL PIPE SCHEDULE 40 AND 80, COPPER PIPE TYPE K.I.M. (ONLY SILVER SOLDERED BRAZED JOINTS TO BE USED WITH COPPER PIPE)
12. FOR GAS PIPING, THE BRACING DETAILS, SCHEDULES AND NOTES MAY BE USED EXCEPT THAT RESTRAINTS SHALL BE INSTALLED AT EVERY 20'-0" O.C. ALSO ALL PIPE 1 INCH AND LARGER SHALL BE BRACED.
13. WASTE, VENT AND ROOF DRAINAGE PIPING SYSTEMS ARE EXCLUDED FROM THE RESTRAINT GUIDELINES.
14. ALTERNATE EVERY OTHER CABLE RESTRAINT IN OPPOSITE DIRECTION. (SHOWN DOTTED)

DUCT CABLE BRACING SCHEDULE

DUCT SIZE (MAX)	* WT/ LIN FT. (MAX)	BOLT SIZE	HORIZONTAL ANGLE	VERTICAL ANGLE	CABLE DIA. **	CABLE DESIGN ***	ANCHOR CONN. TYPE
12"	5#	3/8" DIA.	2 x 2 x 16 GA.	2 x 2 x 12 GA.	1/8" DIA.	7 x 19 GALV	I
16"	8#	3/8" DIA.	2 x 2 x 16 GA.	2.1/2 x 2.1/2 x 12 GA.	1/8" DIA.	7 x 19 GALV	I
24"	10#	3/8" DIA.	2 x 2 x 16 GA.	2.1/2 x 2.1/2 x 12 GA.	1/8" DIA.	7 x 19 GALV	I
30"	13#	3/8" DIA.	2 x 2 x 16 GA.	2.1/2 x 2.1/2 x 12 GA.	1/8" DIA.	7 x 19 GALV	I
42"	20#	3/8" DIA.	2.1/2 x 2.1/2 x 12 GA.	4 x 4 x 14 GA.	3/16" DIA.	7 x 19 GALV	II
54"	27#	3/8" DIA.	2.1/2 x 2.1/2 x 12 GA.	4 x 4 x 14 GA.	3/16" DIA.	7 x 19 GALV	II
60"	36#	3/8" DIA.	3 x 3 x 16 GA.	4 x 4 x 14 GA.	3/16" DIA.	7 x 19 GALV	II
84"	53#	3/8" DIA.	4 x 4 x 14 GA.	4 x 4 x 1/4	1/4" DIA.	7 x 19 GALV	III
96"	80#	1/2" DIA.	4 x 4 x 14 GA.	5 x 3 x 1/4	5/16" DIA.	7 x 19 GALV	IV

* MAXIMUM WEIGHT OF DUCTS OR COMBINATIONS OF DUCTS PER LINEAR FOOT. THE DUCTS MAXIMUM DIMENSION SHALL GOVERN WHAT BRACING IS REQUIRED. FOR ANCHOR CONNECTIONS SEE SCHEDULE. SEE DUCT BRACING DETAILS.

** TWO CABLES REQUIRED AT EACH RESTRAINT POINT, EACH CABLE TO BE INSTALLED 45 DEG. TO HORIZONTAL AND 45 DEG. TO LONGITUDINAL DIRECTION OF DUCT.

*** CABLE SYSTEMS TO BE EQUAL TO AMBER BOOTH C/W THIMBLES, CLAMPS AND GROMMETS.

SCHEDULE FOR TYPICAL CONNECTIONS TO STRUCTURAL SUPPORTING MEMBERS

TYPE	MAX. LOAD CAPACITY POUNDS	PHILLIPS REDHEAD ANCHORS TO CONC. LT. WT.	PHILLIPS REDHEAD ANCHORS TO CONC. HARD ROCK	CONC. CAST-IN PLACE INSERT	BOLT OF STL. BM. CLAMP
I I I	500 1000	3/8" 1/2"	3/8" 3/8"	3/8" 1/2"	3/8" 3/8"
I I I I V	1500 2000	5/8" 3/4"	3/8" 1/2"	1/2" 5/8"	3/8" 1/2"
V V I	3000 4000	2.5/8" 2.3/4"	2.1/2" 2.5/8"	2.1/2" 2.5/8"	5/8" 5/8"

TYPE	SPREADER SIZE	BOLT THRU WOOD	SPAN-CRETE ROD	ANGLE TO SUPPORTING STRUCTURAL MEMBER	ROD SIZE FOR PIPES
I I I	C4 X 5.4 C5 X 6.7	1/2" 3/4"	3/8" 3/8"	3 X 2 X 1/4" X 0'-3" LLH 3.1/2 X 2.1/2 X 5/16 X 0'-3" LLH	1/2" DIA. 1/2" DIA.
I I I I V	C6 X 8.5 C8 X 11.5	*** ***	1/2" 1/2"	3.1/2 X 2.1/2 X 7/16 X 0'-4" LLH 5 X 3 X 1/2 X 0'-4" LLH	5/8" DIA. 3/4" DIA.
V V I	C9 X 13.4 C10 X 15.3	****		2 - 3.1/2 X 2.1/2 X 7/16 X 0'-4" 2 - 5 X 3.1/2 X 0'-4"	7/8" DIA. 7/8" DIA.

NOTES:

FOR SLABS LESS THAN 5" THICK ONLY, THIN SLAB INSERTS MAY BE USED.

FOR USE W/ CONC. CAST-IN PLACE INSERTS OR PHILLIP REDHEAD IN HARD ROCK ONLY.

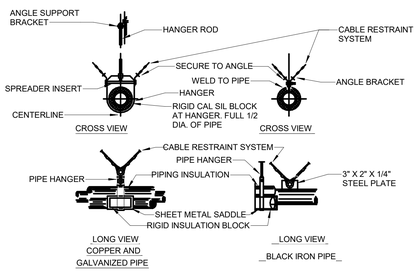
FOR USE WITH CONC. CAST-IN PLACE INSERTS ONLY.

WHERE TYPE III CONNECTIONS ARE REQUIRED FOR WOOD SYSTEMS, TYPE II CONNECTIONS SHALL BE USED WITH REDUCED RESTRAINT SPACING TO 20 FT. O.C. WHERE TYPE IV CONNECTIONS ARE REQUIRED FOR WOOD SYSTEMS, TYPE II CONNECTIONS SHALL BE USED WITH REDUCED RESTRAINT SPACING TO 15 FT. O.C. WHERE TYPE V CONNECTIONS ARE REQUIRED FOR WOOD SYSTEMS, TYPE II CONNECTIONS SHALL BE USED WITH REDUCED RESTRAINT SPACING TO 10 FT. O.C.

THE MECHANICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE STRUCTURAL ENGINEER AND THEN TO THE MECHANICAL ENGINEER, SHOWING CONNECTION TYPE AND LOCATION OF ALL RESTRAINT CONNECTIONS TO THE STRUCTURE.

FOR ESSENTIAL FACILITIES WHERE CONCRETE ANCHOR BOLTS OF THE "REDHEAD" EXPANSION TYPE ARE LOADED IN PULL OUT, 50 PERCENT OF THE BOLTS (ALTERNATE BOLTS IN ANY GROUP ARRANGEMENT) SHALL BE PROOF TESTED TO TWICE THE ALLOWABLE LOAD. IF THERE ARE FAILURES, THE IMMEDIATELY ADJACENT BOLTS MUST THEN ALSO BE TESTED.

"HILTI" AND "RAMSET" ANCHORS ARE EQUAL SUBSTITUTES FOR "REDHEAD".



PIPING RESTRAINT DETAIL

SCALE: NTS

5 / M610

DUCT BRACING GENERAL NOTES

1. DETAILS SHOWN PROVIDE GENERAL GUIDELINES FOR A LATERAL BRACING SYSTEM. A TYPICAL VERTICAL SUPPORT SYSTEM MUST ALSO BE USED.
2. BRACE ALL RECTANGULAR DUCTS 6 SQ. FT. AND LARGER. SPACE ALL ROUND DUCTS 28" DIAMETER AND LARGER.
3. CABLE RESTRAINTS AND BRACING NOT TO EXCEED 30'-0" CENTERS AND SHALL BE PROVIDED AT EACH TURN AT THE END OF EACH DUCT RUN, AND ON EACH SIDE OF FLEXIBLE CONNECTION. BRACE POINTS SHALL NOT EXCEED 15'-0" FROM FLEXIBLE CONNECTION.
4. WHEN COMBINING DUCT GROUPS ON COMMON BRACING SYSTEMS, USE WEIGHTS AND DIMENSIONS FROM BRACING SCHEDULE.
5. ALL HOLES ARE TO BE 1/16 INCH OVERSIZED. PLACE STANDARD CUT WASHERS BETWEEN SHEET METAL ANGLES AND NUT.
6. DUCTS NOT BRACED SHALL BE INSTALLED WITH A 6" MIN. CLEARANCE TO VERTICAL CEILING HANGER WIRES.
7. REHEAT BOXES AND OTHER ITEMS WHICH ATTACH TO THE DUCT SYSTEM SHALL BE BRACED INDEPENDENTLY OF THE DUCTS.
8. ALL SHEET METAL FOR BRACING TO BE FY = 33 KSI MINIMUM. GAUGE FOR SHEET METAL BRACING SHALL BE AS FOLLOWS:

   16 GA. = (0.0598 INCH)
   14 GA. = (0.747 INCH)
   12 GA. = (0.1046 INCH)

9. MINIMUM DISTANCE FROM EDGE OF ANGLE TO BOLTS SHALL BE AS FOLLOWS:

   1/4" TO 1/2" DIA. = 1"
   5/8" DIA. = 1-1/8"
   3/4" DIA. = 1-1/4"
   7/8" DIA. = 1-1/2"

10. DO NOT FASTEN RESTRAINT SYSTEM TO TWO DISSIMILAR PARTS OF A BUILDING THAT MAY RESPOND IN A DIFFERENT MODE DURING AN EARTHQUAKE. FOR EXAMPLE, A WALL AND ROOF.
11. ALTERNATE EVERY OTHER CABLE RESTRAINT IN OPPOSITE DIRECTION. (SHOWN DOTTED)

PIPE CABLE BRACING SCHEDULE

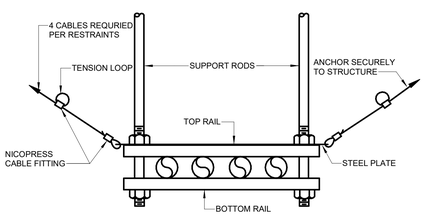
PIPE SIZE	HANGER ROD SIZE	MAX. ROD LENGTH	HANGAR TYPE	BOLTS AND CABLE	*CABLE SIZE	CABLE DESIGN ***	ANCHOR CONN. TYPE
1-1/2"	1/2" DIA.	25"	CLEVIS	3/8" DIA.	1/8" DIA.	7 x 19 GALV	I
2"	1/2" DIA.	25"	CLEVIS	3/8" DIA.	1/8" DIA.	7 x 19 GALV	I
2-1/2"	5/8" DIA.	31"	CLEVIS	3/8" DIA.	1/8" DIA.	7 x 19 GALV	I
3"	5/8" DIA.	31"	CLEVIS	3/8" DIA.	1/8" DIA.	7 x 19 GALV	II
3-1/2"	5/8" DIA.	31"	CLEVIS	3/8" DIA.	3/8" DIA.	7 x 19 GALV	II
4"	3/4" DIA.	37"	CLEVIS	3/8" DIA.	3/8" DIA.	7 x 19 GALV	II
5"	3/4" DIA.	37"	CLEVIS	1/2" DIA.	3/8" DIA.	7 x 19 GALV	III
6"	3/4" DIA.	37"	CLEVIS	5/8" DIA.	1/2" DIA.	7 x 19 GALV	IV
8"	7/8" DIA.	43"	CLEVIS	5/8" DIA.	5/8" DIA.	7 x 19 GALV	V
10"	7/8" DIA.	43"	CLEVIS	3/4" DIA.	3/8" DIA.	7 x 19 GALV	VI

FOR ANCHOR CONNECTIONS SEE SCHEDULE

SEE PIPE BRACING DETAILS.

* TWO CABLES REQUIRED AT EACH RESTRAINT POINT, EACH CABLE TO BE INSTALLED 45 DEG. TO HORIZONTAL AND 45 DEG. TO LONGITUDINAL DIRECTION OF PIPE.

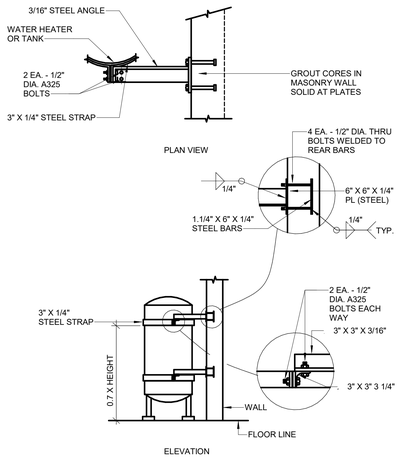
** CABLE SYSTEMS TO BE EQUAL TO AMBER BOOTH C/W THIMBLES, CLAMPS AND GROMMETS.



TYPICAL TRAPEZE HANGER SEISMIC RESTRAINT

SCALE: NTS

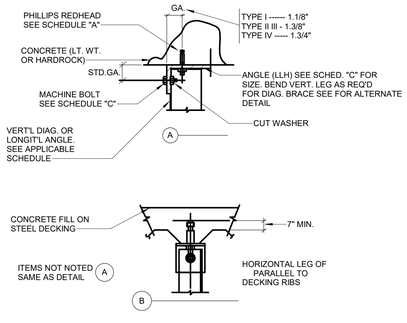
6 / M610



VERTICAL TANK SEISMIC RESTRAINT

SCALE: NTS

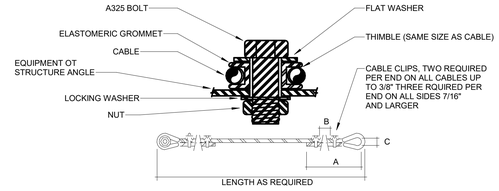
3 / M610



CONNECTIONS TO CONCRETE DETAIL

SCALE: NTS

2 / M610



NOTES:

1. CABLE, THIMBLES, CLIPS, GROMMETS & FLAT WASHERS ARE TO BE FURNISHED BY RESTRAINT MANUFACTURER. ALL OTHER HARDWARE TO BE PROVIDED BY CONTRACTOR.
2. ENTIRE SYSTEM TO BE EQUAL TO AMBER BOOTH.
3. CABLE CLIPS MUST BE ORIENTED AS SHOWN WITH SHORT END OF CABLE ON THE CURVED PART OF THE CLIP.

CABLE SCHEDULE

CABLE DIA.	CABLE DESIGN	A	B	C	BOLT SIZE	ALLOWABLE LOAD (lbf)	BREAKING STRENGTH (lbf)
1/8"	7x19 GALV.	5.1/4"	1.5/8"	5/8"	3/8"	660	2000
3/16"	7x19 GALV.	5.3/4"	1.5/8"	5/8"	3/8"	1400	4200
1/4"	7x19 GALV.	6.3/4"	1.5/8"	11/16"	3/8"	2330	7000
5/16"	7x19 GALV.	7.3/8"	1.5/8"	13/16"	5/8"	3260	9800
3/8"	7x19 GALV.	8.7/8"	1.5/8"	1"	5/8"	4800	14400
7/16"	6x9 IWRC	17"	1.5/8"	1"	5/8"	5920	17800
1/2"	6x9 IWRC	18"	1.5/8"	1.1/8"	3/4"	7660	23000

CABLE RESTRAINT DETAIL

SCALE: NTS

1 / M610

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

LICENSED PROFESSIONAL ENGINEER #334524-2202 JAMES AUSTIN BERRETT 11/8/2023 UTAH

OLSEN & PETERSON CONSULTING ENGINEERS, INC.
10 East 2700 South, Salt Lake City, UT 84115
Phone: (801) 486-8446 Fax: (801) 487-0300

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

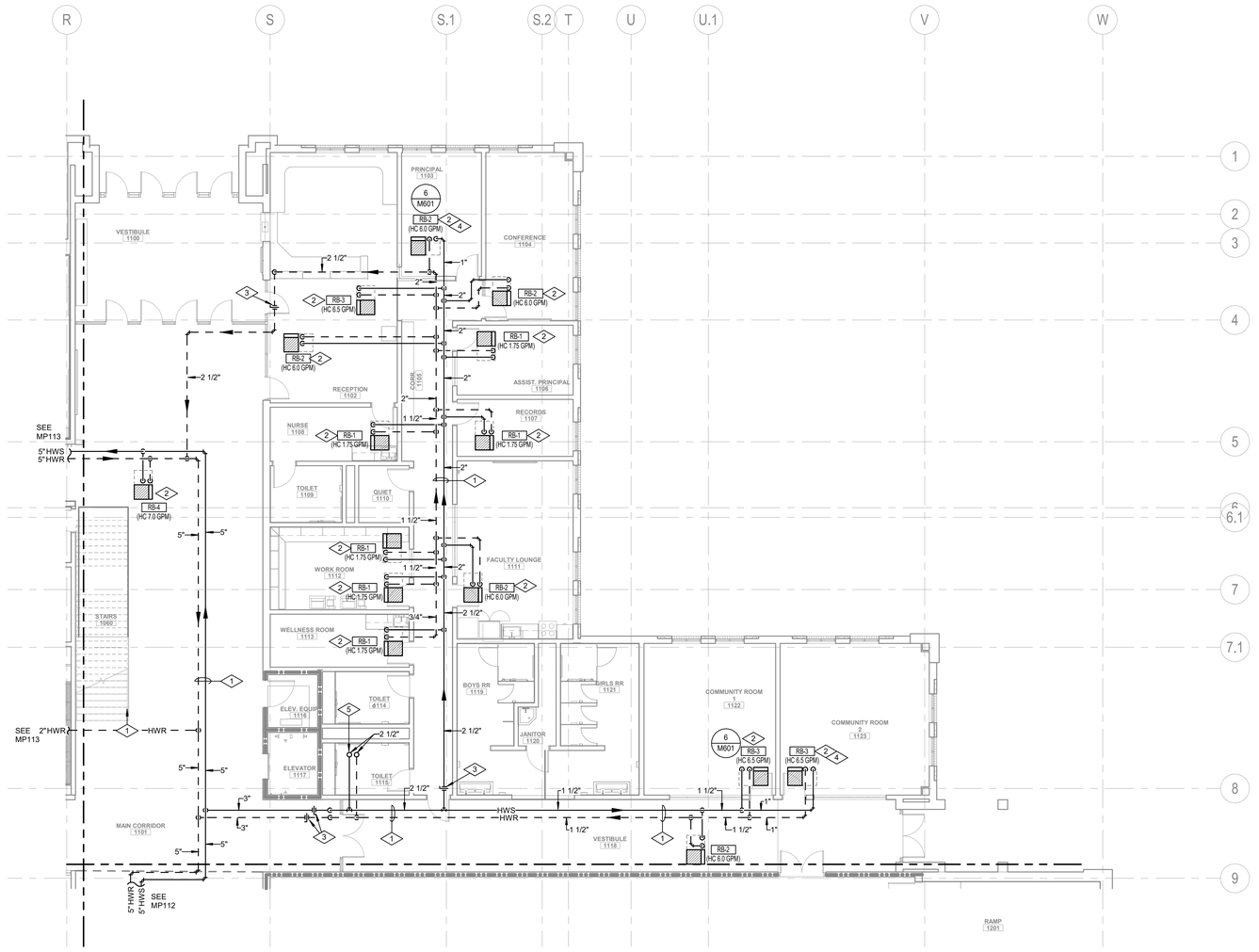
MECHANICAL DETAILS

M610

11/6/2023 4:59:27 PM

REFERENCE NOTES

1. PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. DUCT/PIPING CROSSOVERS MAY BE LIMITED IN SOME AREAS AND WILL REQUIRE OFF-SETS OR IN SOME CASES RE-ROUTING FROM LOCATION SHOWN. INSULATION MUST BE CONTINUOUS THRU ALL PENETRATIONS (TYPICAL).
2. HEATING HOT WATER SUPPLY AND RETURN PIPING DROP TO SERVE VAV REHEAT COIL (TYPICAL).
3. BUTTERFLY VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
4. PROVIDE 3-WAY ATC VALVE WITH BYPASS ON HOT WATER PIPING SERVING VAV REHEAT COIL. BALANCE TO REHEAT COIL GPM.
5. HWS AND HWR UP TO FLOOR ABOVE. SEE SHEET M402 FOR CONTINUATION.



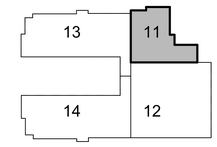
MECHANICAL PIPING PLAN - LEVEL 01 - AREA 11

NORTH

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



NORTH

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OGDEN SCHOOL DISTRICT

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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PIPING PLAN - LEVEL 01 - AREA 11

MP111

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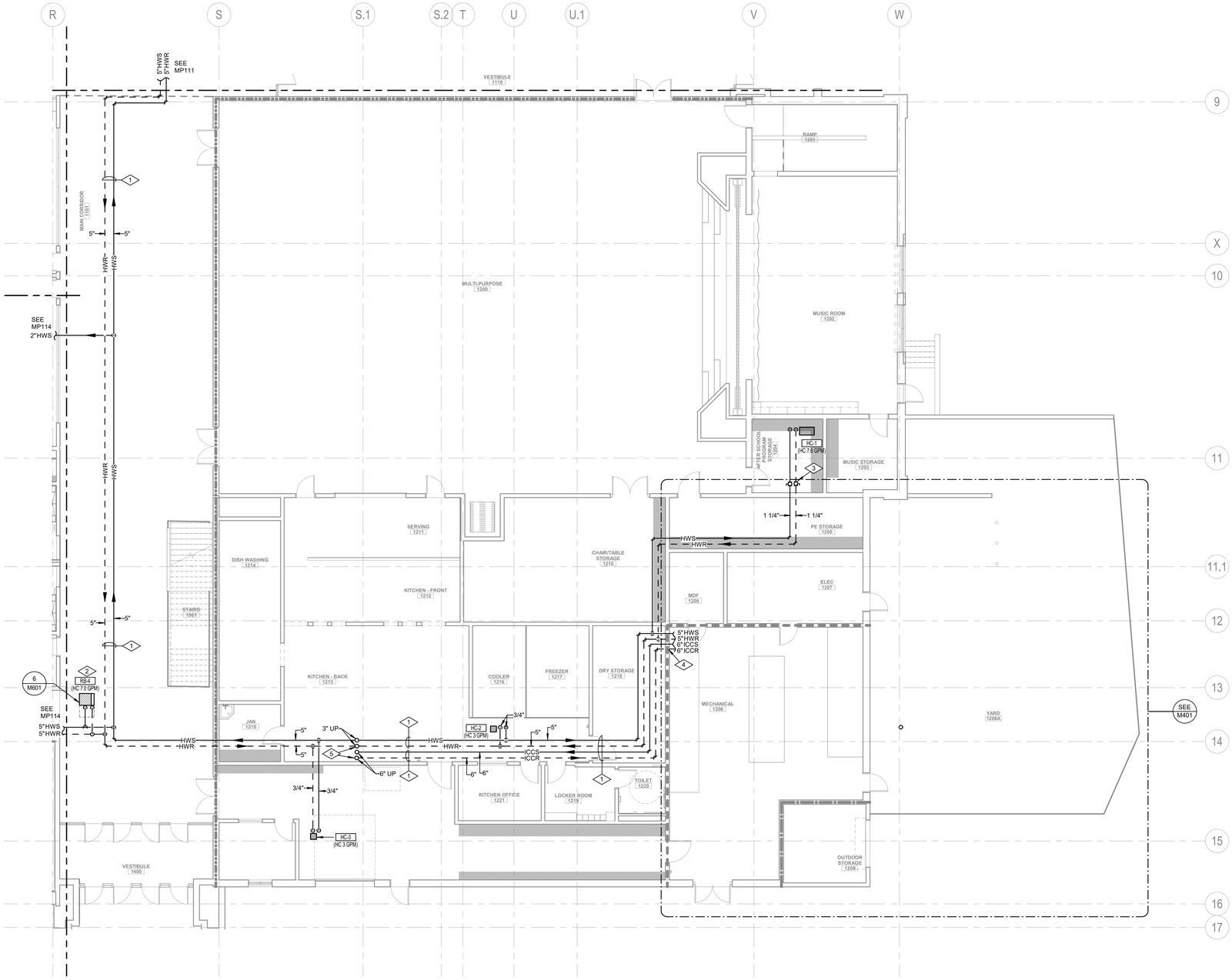


MECHANICAL PIPING PLAN - LEVEL 01 - AREA 12

NORTH

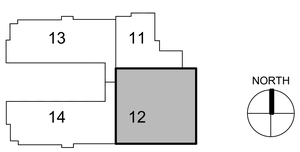
0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. DUCT/PIPING CROSSOVERS MAY BE LIMITED IN SOME AREAS AND WILL REQUIRE OFF-SETS OR IN SOME CASES RE-ROUTING FROM LOCATION SHOWN. INSULATION MUST BE CONTINUOUS THRU ALL PENETRATIONS (TYPICAL).
2. VAV BOX WITH HOT WATER REHEAT COIL (TYPICAL). SEE VAV REHEAT BOX SCHEDULE FOR BRANCH LINE SIZE.
3. FULL PORT BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
4. FIRE CAULK PIPE PENETRATIONS AT 1HR AND 2HR WALL (TYPICAL). COORDINATE WITH LIFE AND SAFEYT PLAN.
5. HWS, HWR, ICCS AND ICCR UP TO FLOOR ABOVE. SEE SHEET M402 FOR CONTINUATION.

KEY PLAN - MAIN LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PIPING PLAN - LEVEL 01 - AREA 12

MP112

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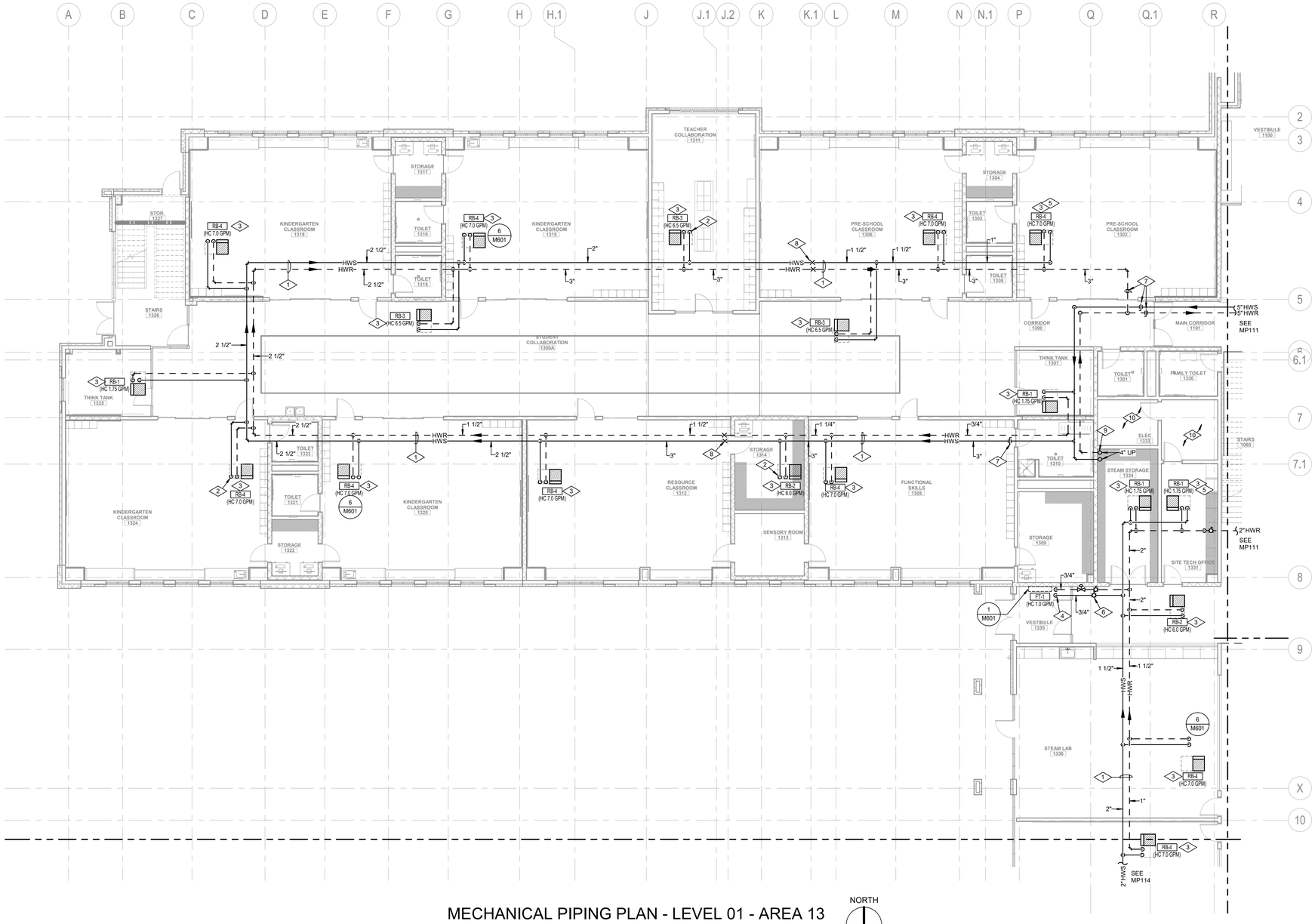


MECHANICAL PIPING PLAN - LEVEL 01 - AREA 13

0 4' - 0" 8' - 0" 16' - 0"

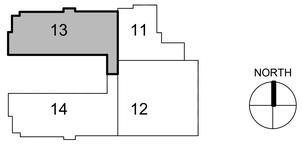
SCALE: 1/8" = 1'-0"

NORTH

REFERENCE NOTES

1. PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. DUCT/PIPING CROSSOVERS MAY BE LIMITED IN SOME AREAS AND WILL REQUIRE OFF-SETS OR IN SOME CASES RE-ROUTING FROM LOCATION SHOWN. INSULATION MUST BE CONTINUOUS THRU ALL PENETRATIONS (TYPICAL).
2. HEATING HOT WATER SUPPLY AND RETURN PIPING DROP TO SERVE VAV REHEAT COIL (TYPICAL).
3. VAV BOX WITH HOT WATER REHEAT COIL (TYPICAL). SEE VAV REHEAT BOX SCHEDULE FOR BRANCH LINE SIZE.
4. FIN TUBE FT-1 IS LOCATED ABOVE VESTIBULE CEILING.
5. PROVIDE 3-WAY ATC VALVE WITH BYPASS ON HOT WATER PIPING SERVING VAV REHEAT COIL. BALANCE TO REHEAT COIL GPM.
6. FULL PORT BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
7. BUTTERFLY VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
8. PIPE ANCHORS TO ALLOW EXPANSION JOINT TO FUNCTION PROPERLY.
9. HWS AND HWR UP TO FLOOR ABOVE. SEE SHEET M402 FOR CONTINUATION.
10. FOR CONTINUATION OF PIPING SEE SHEET P114.

KEY PLAN - MAIN LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	11-22-23	Addendum 03

OSD HILLCREST ELEMENTARY REBUILD

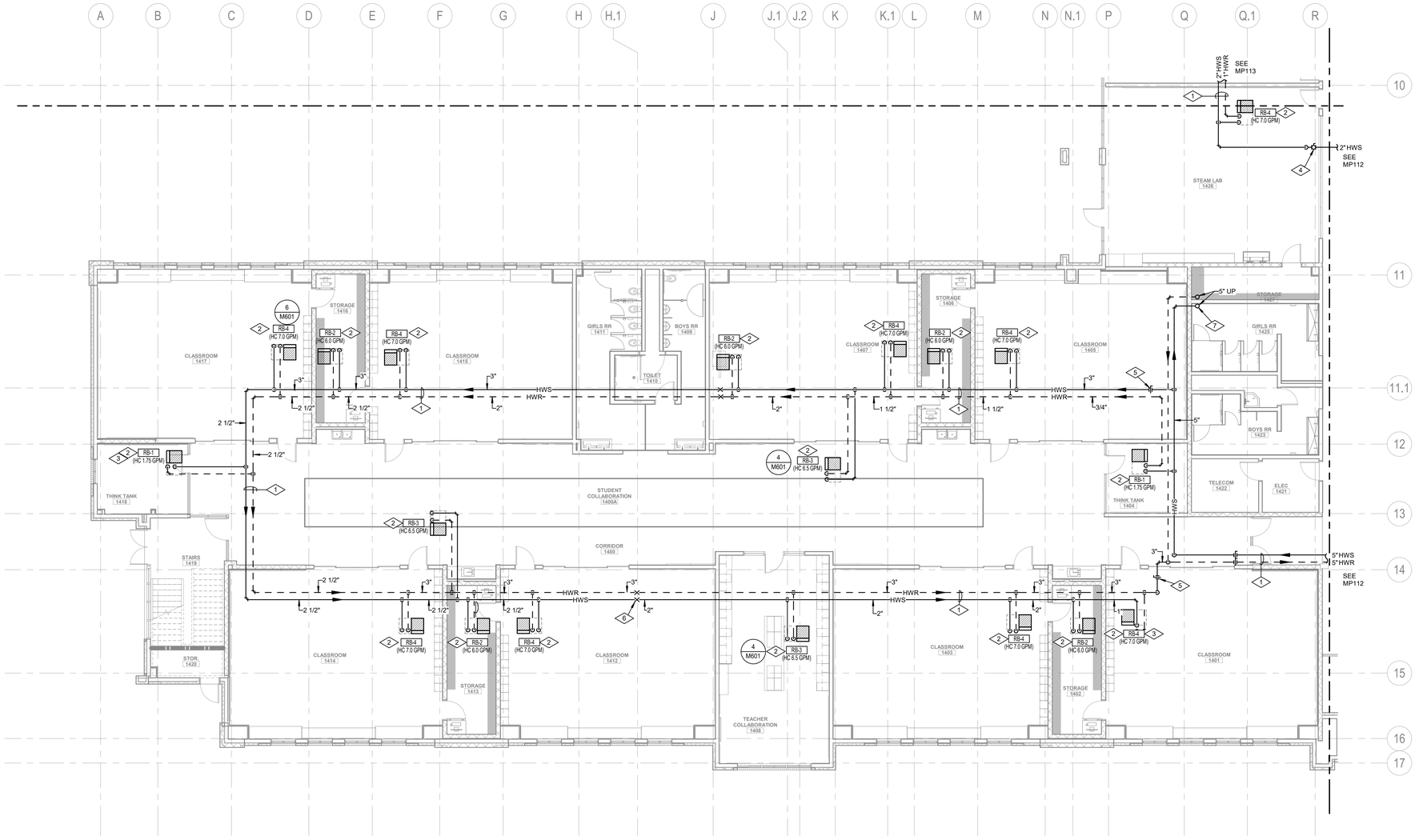
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PIPING PLAN - LEVEL 01 - AREA 13

2 MP113

11/22/2023 11:43:07 AM



MECHANICAL PIPING PLAN - LEVEL 01 - AREA 14

NORTH

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. DUCT/PIPING CROSSOVERS MAY BE LIMITED IN SOME AREAS AND WILL REQUIRE OFF-SETS OR IN SOME CASES RE-ROUTING FROM LOCATION SHOWN. INSULATION MUST BE CONTINUOUS THRU ALL PENETRATIONS (TYPICAL).
2. VAV BOX WITH HOT WATER REHEAT COIL (TYPICAL). SEE VAV REHEAT BOX SCHEDULE FOR BRANCH LINE SIZE.
3. PROVIDE 3-WAY ATC VALVE WITH BYPASS ON HOT WATER PIPING SERVING VAV REHEAT COIL. BALANCE TO REHEAT COIL GPM.
4. FULL PORT BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
5. BUTTERFLY VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
6. PIPE ANCHORS TO ALLOW EXPANSION JOINT TO FUNCTION PROPERLY.
7. HWS AND HWR UP TO FLOOR ABOVE. SEE SHEET M402 FOR CONTINUATION.

KEY PLAN - MAIN LEVEL

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	11-22-23	Addendum 03

OSD HILLCREST ELEMENTARY REBUILD

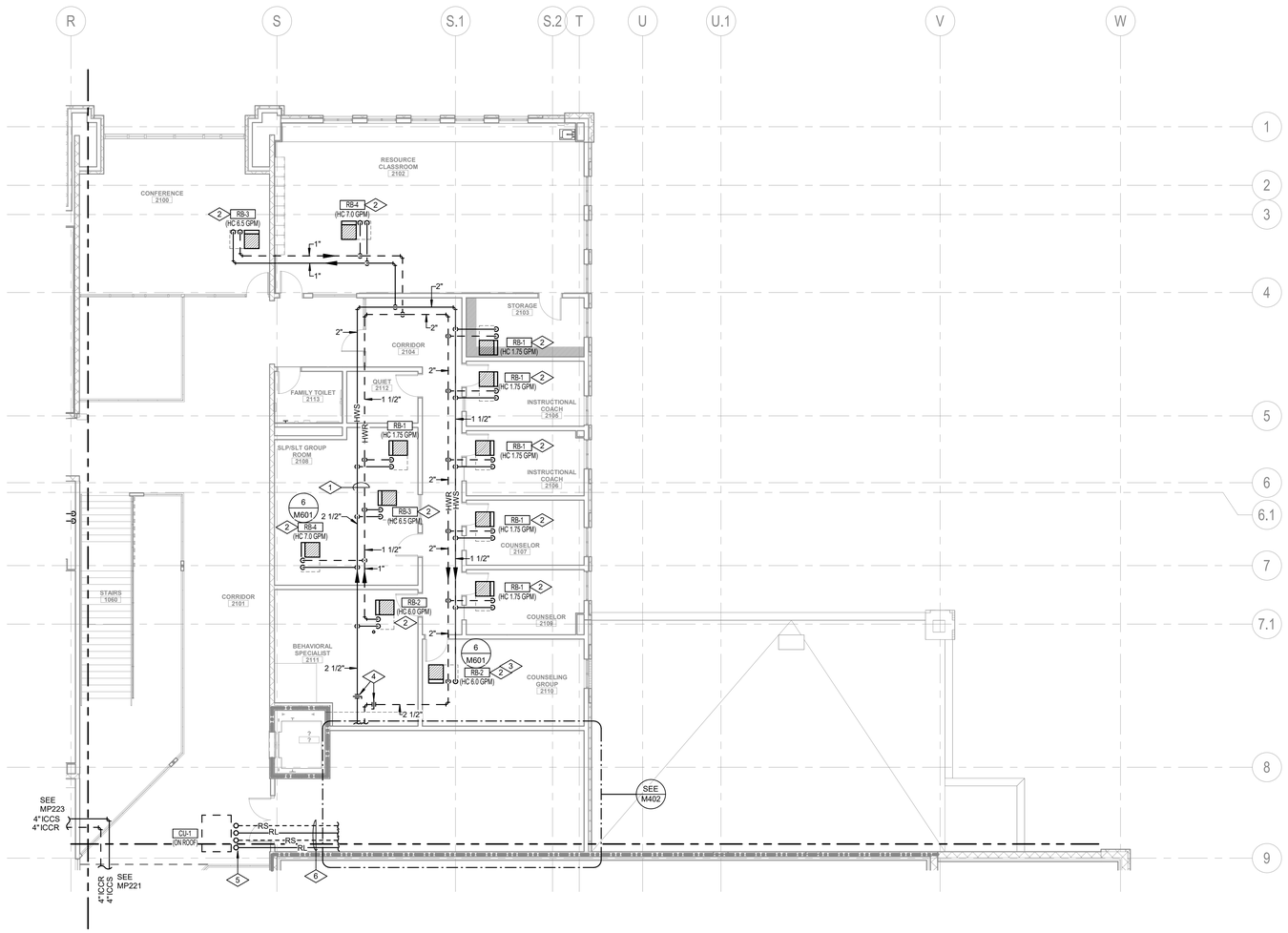
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PIPING PLAN - LEVEL 01 - AREA 14

2 MP114

11/22/2023 11:43:09 AM



MECHANICAL PIPING PLAN - LEVEL 02 - AREA 21

0 4' - 0" 8' - 0" 16' - 0"

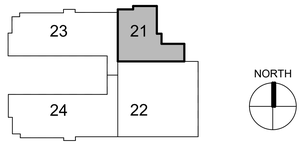
SCALE: 1/8" = 1'-0"

NORTH

REFERENCE NOTES

1. PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. DUCT/PIPING CROSSOVERS MAY BE LIMITED IN SOME AREAS AND WILL REQUIRE OFF-SETS OR IN SOME CASES RE-ROUTING FROM LOCATION SHOWN. INSULATION MUST BE CONTINUOUS THRU ALL PENETRATIONS (TYPICAL).
2. VAV BOX WITH HOT WATER REHEAT COIL (TYPICAL). SEE VAV REHEAT BOX SCHEDULE FOR BRANCH LINE SIZE.
3. PROVIDE 3-WAY ATC VALVE WITH BYPASS ON HOT WATER PIPING SERVING VAV REHEAT COIL. BALANCE TO REHEAT COIL GPM.
4. BUTTERFLY VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
5. REFRIGERANT LINES UP THRU ROOF TO CU-1. SEE DETAIL 2/M607. LINES TO PENETRATE ROOF AND FLASH INDIVIDUALLY.
6. REFRIGERANT PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING COORDINATE ROUTING WITH ALL TRADES.

KEY PLAN - UPPER LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

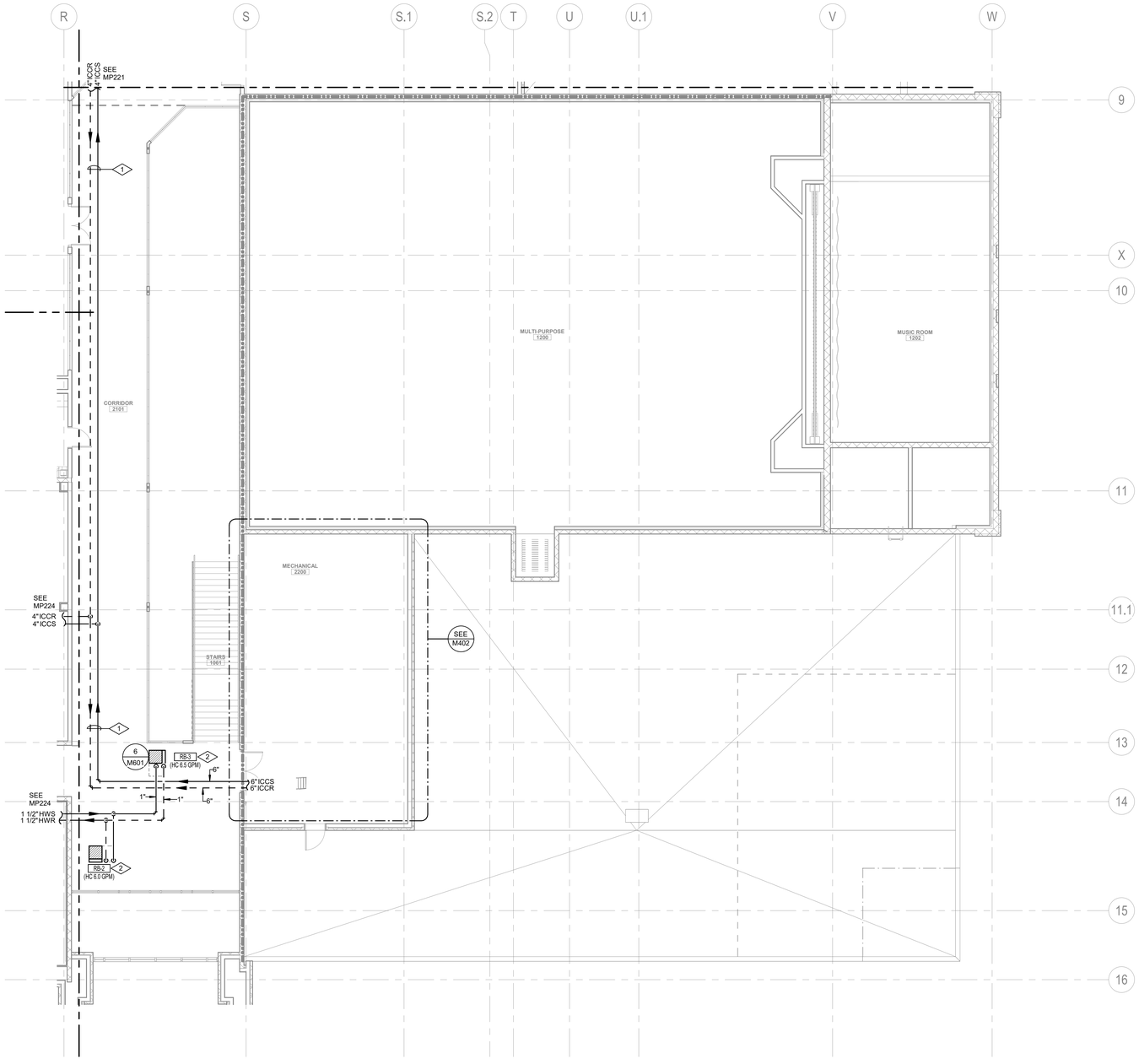
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PIPING PLAN - LEVEL 02 - AREA 21

MP221

11/16/2023 2:12:10 PM



REFERENCE NOTES

1. PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. DUCT/PIPING CROSSOVERS MAY BE LIMITED IN SOME AREAS AND WILL REQUIRE OFF-SETS OR IN SOME CASES RE-ROUTING FROM LOCATION SHOWN. INSULATION MUST BE CONTINUOUS THRU ALL PENETRATIONS (TYPICAL).
2. VAV BOX WITH HOT WATER REHEAT COIL (TYPICAL). SEE VAV REHEAT BOX SCHEDULE FOR BRANCH LINE SIZE.

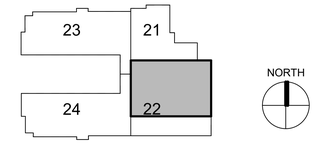
MECHANICAL PIPING PLAN - LEVEL 02 - AREA 22

NORTH

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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BID PACKAGE 5 - GENERAL CONSTRUCTION

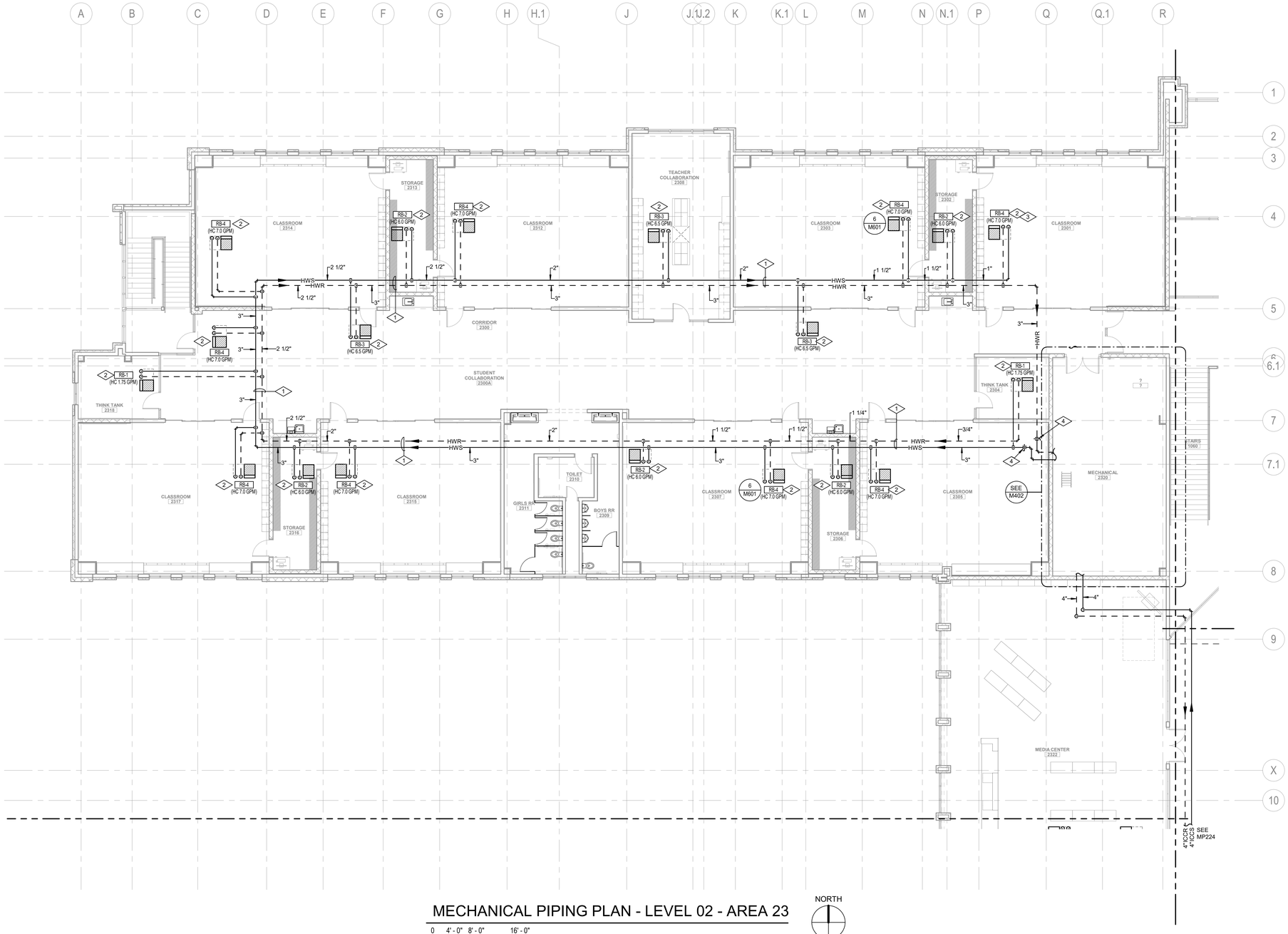
MECHANICAL PIPING PLAN - LEVEL 02 - AREA 22

MP222

11/6/2023 4:58:40 PM

REFERENCE NOTES

1. PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. DUCT/PIPING CROSSOVERS MAY BE LIMITED IN SOME AREAS AND WILL REQUIRE OFF-SETS OR IN SOME CASES RE-ROUTING FROM LOCATION SHOWN. INSULATION MUST BE CONTINUOUS THRU ALL PENETRATIONS (TYPICAL).
2. VAV BOX WITH HOT WATER REHEAT COIL (TYPICAL). SEE VAV REHEAT BOX SCHEDULE FOR BRANCH LINE SIZE.
3. PROVIDE 3-WAY ATC VALVE WITH BYPASS ON HOT WATER PIPING SERVING VAV REHEAT COIL. BALANCE TO REHEAT COIL GPM.
4. BUTTERFLY VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.



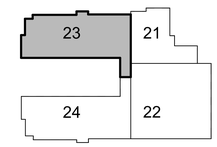
MECHANICAL PIPING PLAN - LEVEL 02 - AREA 23

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - UPPER LEVEL



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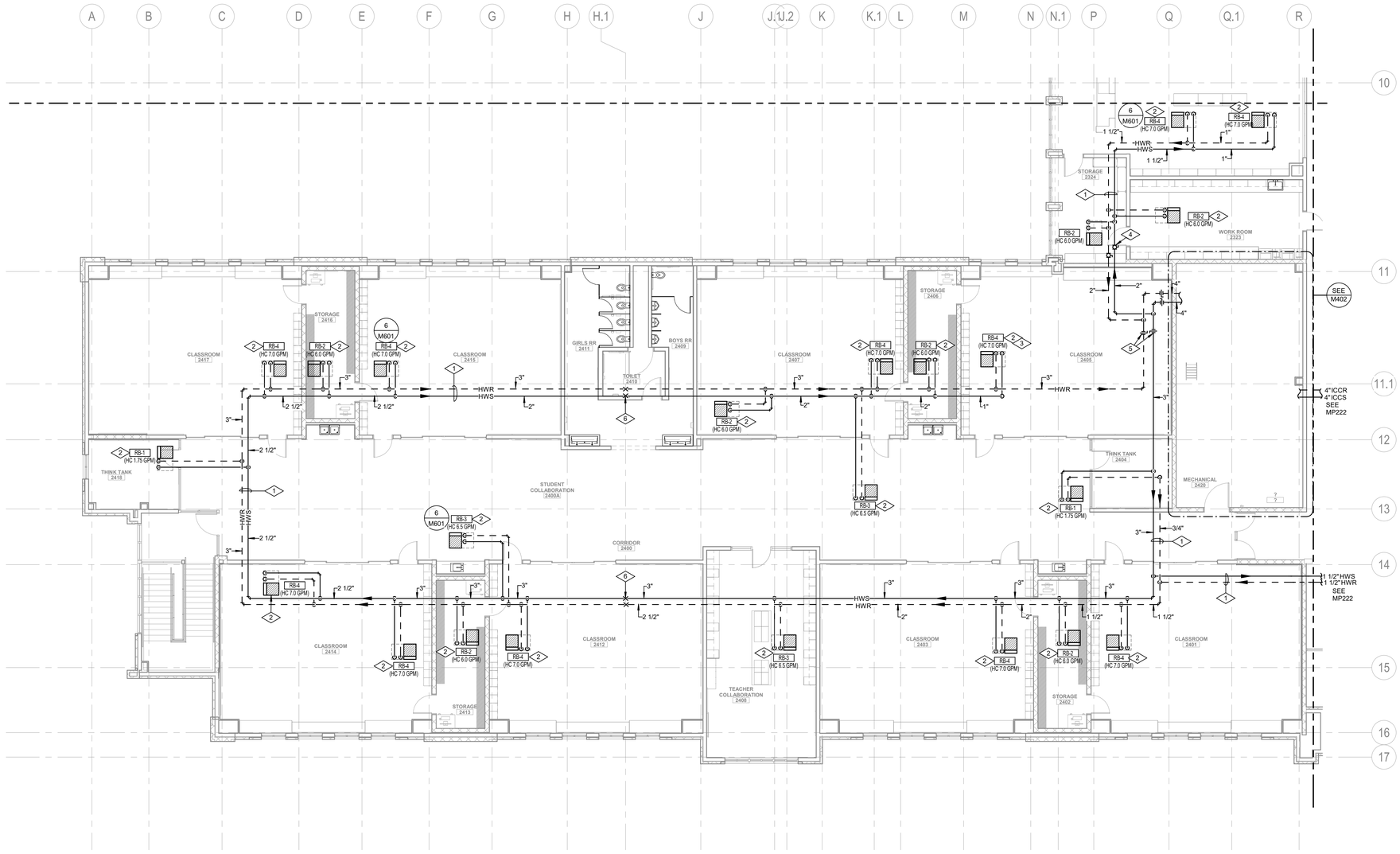
MECHANICAL PIPING PLAN - LEVEL 02 - AREA 23

MP223

11/8/2023 4:58:44 PM



MECHANICAL PIPING PLAN - LEVEL 02 - AREA 24

0 4'-0" 8'-0" 16'-0"

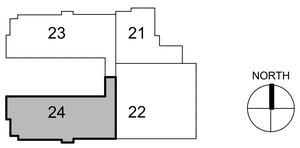
SCALE: 1/8" = 1'-0"

NORTH

REFERENCE NOTES

1. PIPING TO RUN AS HIGH AS POSSIBLE ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. DUCT/PIPING CROSSOVERS MAY BE LIMITED IN SOME AREAS AND WILL REQUIRE OFF-SETS OR IN SOME CASES RE-ROUTING FROM LOCATION SHOWN. INSULATION MUST BE CONTINUOUS THRU ALL PENETRATIONS (TYPICAL).
2. VAV BOX WITH HOT WATER REHEAT COIL (TYPICAL). SEE VAV REHEAT BOX SCHEDULE FOR BRANCH LINE SIZE.
3. PROVIDE 3-WAY ATC VALVE WITH BYPASS ON HOT WATER PIPING SERVING VAV REHEAT COIL. BALANCE TO REHEAT COIL GPM.
4. FULL PORT BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
5. BUTTERFLY VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
6. PIPE ANCHORS TO ALLOW EXPANSION JOINT TO FUNCTION PROPERLY.

KEY PLAN - UPPER LEVEL



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2	11-22-23	Addendum 03

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

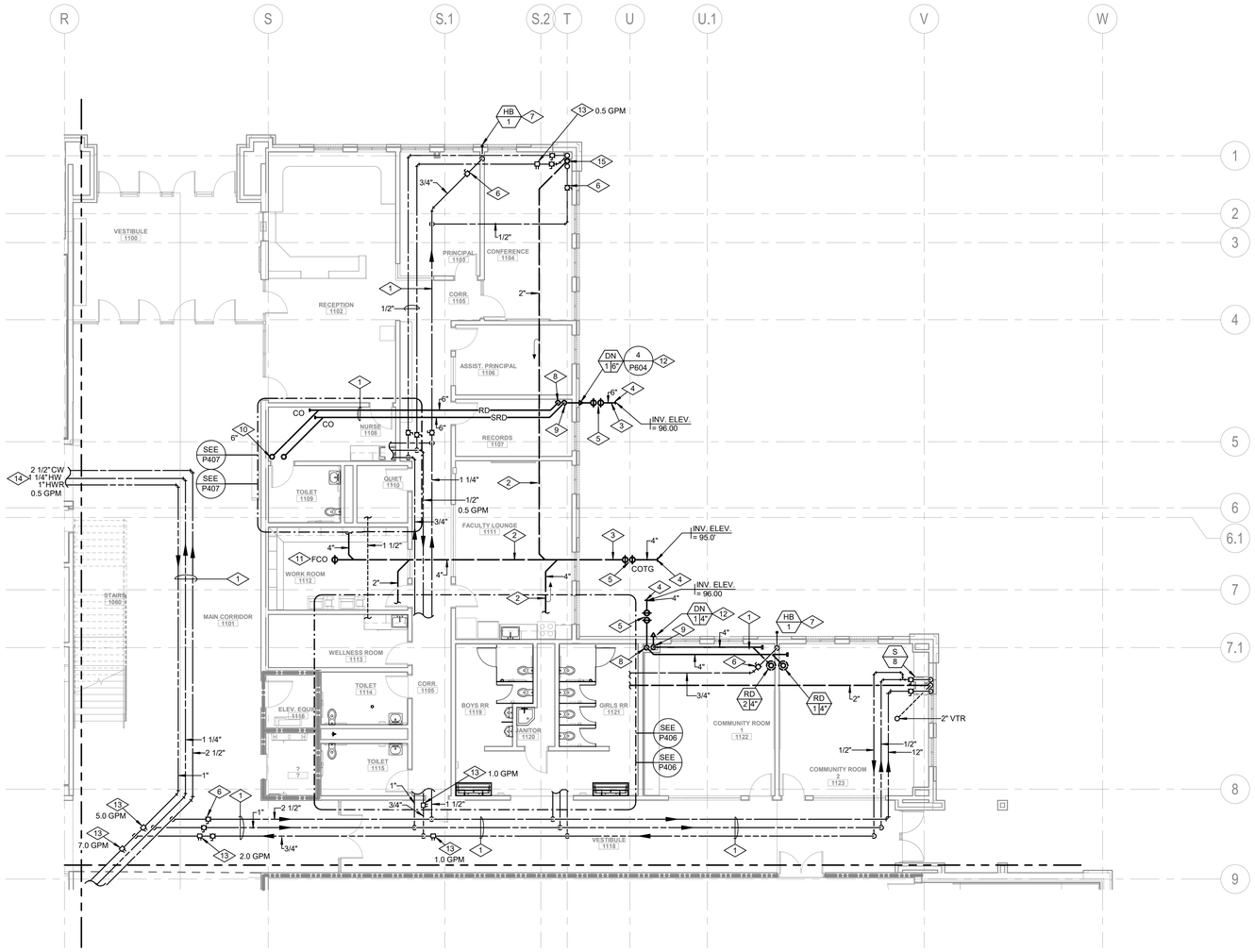
BID PACKAGE 5 - GENERAL CONSTRUCTION

MECHANICAL PIPING PLAN - LEVEL 02 - AREA 24

2

MP224

11/22/2023 11:43:17 AM



PLUMBING PLAN - LEVEL 01 - AREA 11

NORTH

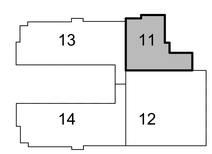
0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

#	
1	PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2	PIPING TO RUN BELOW FINISHED FLOOR. COORDINATE ROUTING WITH STRUCTURAL FOOTINGS (TYPICAL).
3	PIPING TO RUN BELOW FINISHED GRADE.
4	EXTEND PIPING 5'-0" BEYOND BUILDING. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH CIVIL DRAWINGS AND SITE UTILITY CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO SITE UTILITIES.
5	DOUBLE CLEANOUT TO GRADE (TYPICAL). SEE DETAIL 6/P602.
6	BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
7	EXTERIOR HOSE BIBB TO BE MOUNTED 18" ABOVE FINISHED GRADE. HOSE BIBB TO BE CENTERED IN BLOCK.
8	PRIMARY ROOF DRAIN DROP TO BELOW FINISHED FLOOR. PROVIDE CLEANOUT AT BASE, 18" ABOVE FINISHED FLOOR. COORDINATE WITH STRUCTURAL FOOTINGS AND ARCHITECTURAL CHASE LOCATIONS.
9	SECONDARY ROOF DRAIN DROP TO 18" ABOVE FINISHED GRADE OR AS REQUIRED TO LOCATE "DN" IN CENTER OF BLOCK COURSE. COORDINATE WITH ARCHITECTURAL CHASE LOCATIONS.
10	PRIMARY & SECONDARY ROOF DRAIN DROPS FROM FLOOR ABOVE. SEE SHEET P221 FOR CONTINUATION.
11	FLOOR CLEANOUT (FCO) SEE DETAIL 5/P602.
12	CENTER DN-1 IN BLOCK COURSE. (TYPICAL)
13	CALIBRATED BALANCING VALVE ON HOT WATER RE-CIRCULATION LINE. BALANCE FLOW TO GPM SHOWN.
14	FOR CONTINUATION OF PIPING SEE SHEET P113.
15	2" WASTE DOWN, 1/2" HOT, HOT RE-CIRC & COLD UP TO SINK.

KEY PLAN - MAIN LEVEL



NORTH

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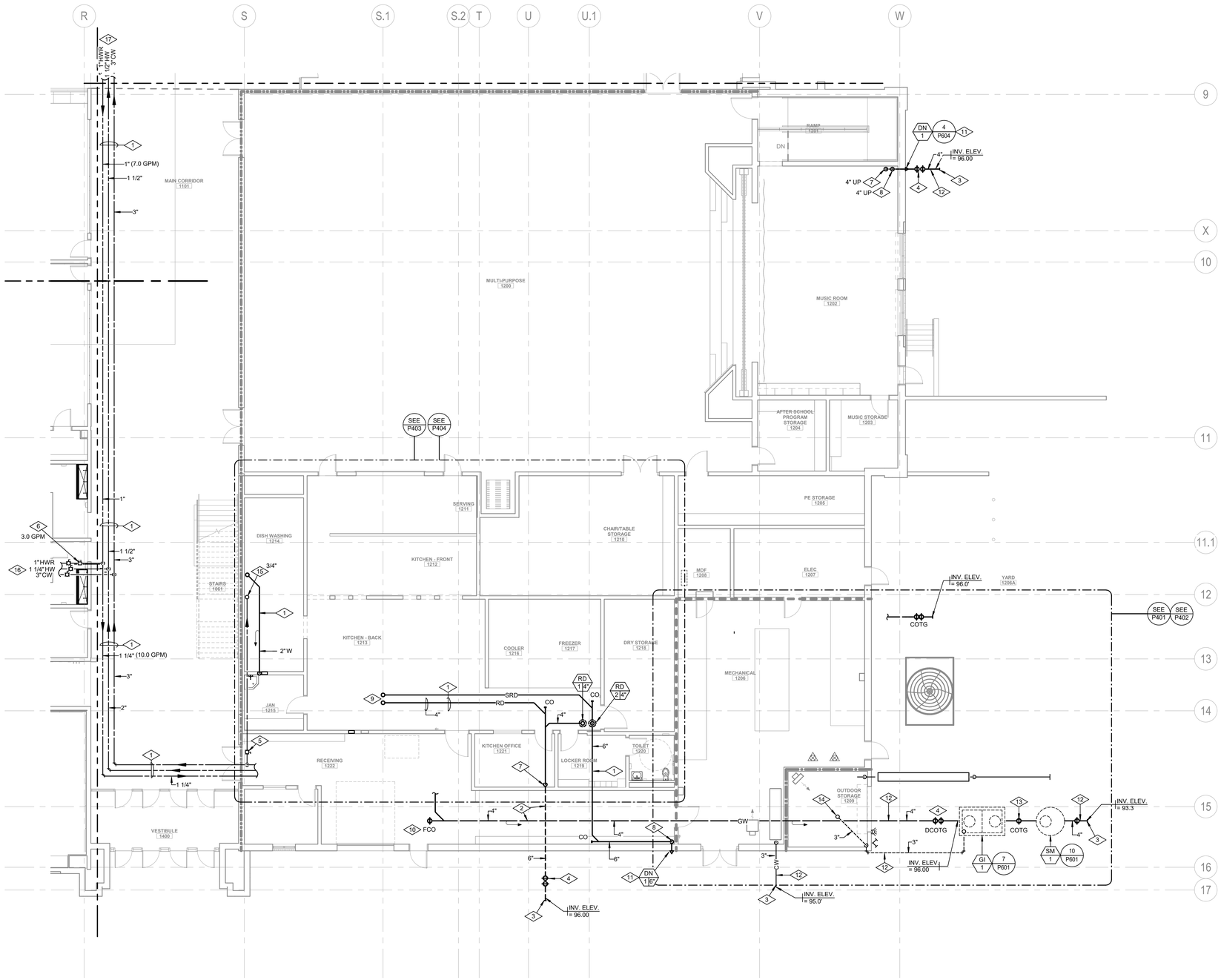
BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING PLAN - LEVEL 01 - AREA 11

2 P111

11/22/2023 11:42:13 AM



PLUMBING PLAN - LEVEL 01 - AREA 12

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

NORTH

REFERENCE NOTES

1 PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).

2 PIPING TO RUN BELOW FINISHED FLOOR. COORDINATE ROUTING WTIH STRUCTURAL FOOTINGS (TYPICAL).

3 EXTEND PIPING 5'-0" BEYOND BUILDING. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH CIVIL DRAWINGS AND SITE UTIITY CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO SITE UTILITIES.

4 DOUBLE CLEANOUT TO GRADE (TYPICAL). SEE DETAIL 6/P602.

5 BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.

6 CALIBRATED BALANCING VALVE ON HOT WATER RE-CIRCULATION LINE. BALANCE FLOW TO GPM SHOWN.

7 PRIMARY ROOF DRAIN DROP TO BELOW FINISHED FLOOR. PROVIDE CLEANOUT AT BASE, 18" ABOVE FINISHED FLOOR. COORDINATE WITH STRUCTURAL FOOTING AND ARCHITECTURAL CHASE LOCATIONS.

8 SECONDARY ROOF DRAIN DROP TO 18" ABOVE FINISHED GRADE OR AS REQUIRED TO LOCATE "DN" IN CENTER OF BLOCK COURSE. COORDINATE WITH ARCHITECTURAL CHASE LOCATIONS.

9 PRIMARY & SECONDARY ROOF DRAIN DRPS FROM FLOOR ABOVE. SEE SHEET P221 FOR CONTINUATION.

10 FLOOR CLEANOUT (FCO) SEE DETAIL 4/P603.

11 CENTER DN-1 IN BLOCK COURSE. (TYPICAL)

12 PIPING TO RUN BELOW FINISHED GRADE.

13 SINGLE CLEANOUT TO GRADE. SEE DETAIL 8/P603

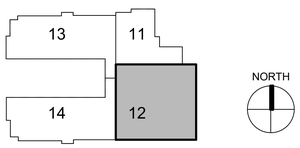
14 VENT THRU ROOF. (VTR) SEE DETAIL 7/P602

15 3/4" COLD UP TO MECHANICAL 2200. SEE SHEET P222.

16 FOR CONTINUATION OF PIPING SEE SHEET P114.

17 FOR CONTINUATION OF PIPING SEE SHEET P111

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

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130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

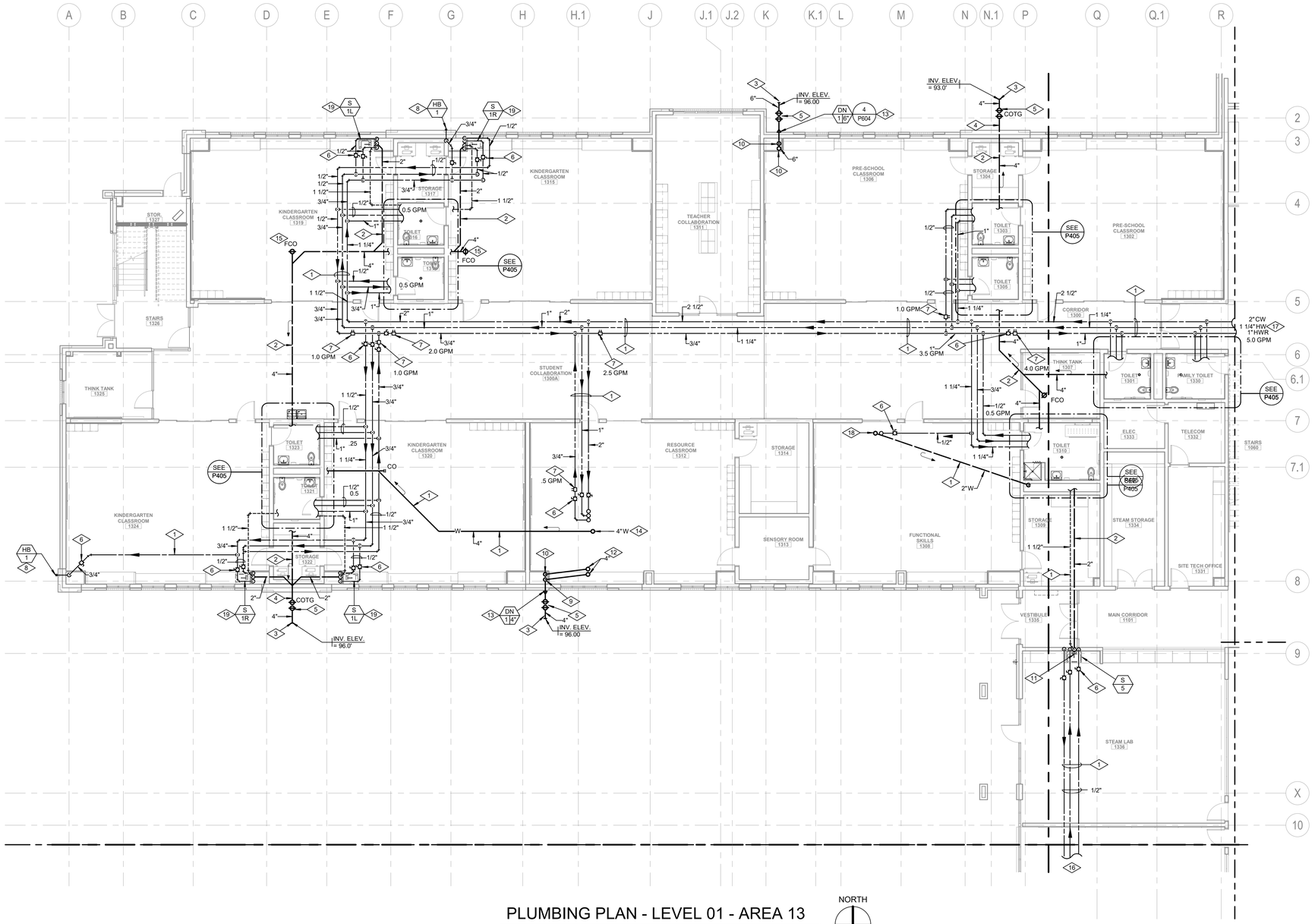
PLUMBING PLAN - LEVEL 01 - AREA 12

P112

11/6/2023 5:14:27 PM

REFERENCE NOTES

#	
1	PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2	PIPING TO RUN BELOW FINISHED FLOOR. COORDINATE ROUTING WITH STRUCTURAL FOOTINGS (TYPICAL).
3	EXTEND PIPING 5'-0" BEYOND BUILDING. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH CIVIL DRAWINGS AND SITE UTILITY CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO SITE UTILITIES.
4	PIPING TO RUN BELOW FINISHED GRADE.
5	DOUBLE CLEANOUT TO GRADE (TYPICAL). SEE DETAIL 6/P602.
6	BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
7	CALIBRATED BALANCING VALVE ON HOT WATER RECIRCULATING LINE. BALANCE FLOW TO GPM SHOWN.
8	EXTERIOR HOSE BIBB TO BE MOUNTED 18" ABOVE FINISHED GRADE. HOSE BIBB TO BE CENTERED IN BLOCK.
9	PRIMARY ROOF DRAIN DROP TO BELOW FINISHED FLOOR. PROVIDE CLEANOUT AT BASE, 18" ABOVE FINISHED FLOOR. COORDINATE WITH STRUCTURAL FOOTING AND ARCHITECTURAL CHASE LOCATIONS.
10	SECONDARY ROOF DRAIN DROP TO 18" ABOVE FINISHED GRADE OR AS REQUIRED TO LOCATE "DN" IN CENTER OF BLOCK COURSE. COORDINATE WITH ARCHITECTURAL CHASE LOCATIONS.
11	WALL CLEANOUT (WCO) (TYPICAL). SEE DETAIL 7/P601.
12	PRIMARY & SECONDARY ROOF DRAIN DROPS FROM FLOOR ABOVE. SEE SHEET P223 FOR CONTINUATION.
13	CENTER DN-1 IN BLOCK COURSE. (TYPICAL)
14	PIPING DOWN FROM ABOVE. SEE SHEET P223. & P406.
15	FLOOR CLEANOUT. (FCO) SEE DETAIL 5/P602.
16	FOR CONTINUATION OF PIPING SEE SHEET P114.
17	FOR CONTINUATION OF PIPING SEE SHEET P111.
18	2" WASTE DOWN, 1/2" COLD WATER UP TO DF-1. SEE SHEET P223.
19	VALVE SINK BUBBLER SEPARATE FROM SINK. (TYPICAL)



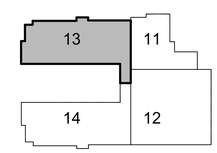
PLUMBING PLAN - LEVEL 01 - AREA 13

NORTH

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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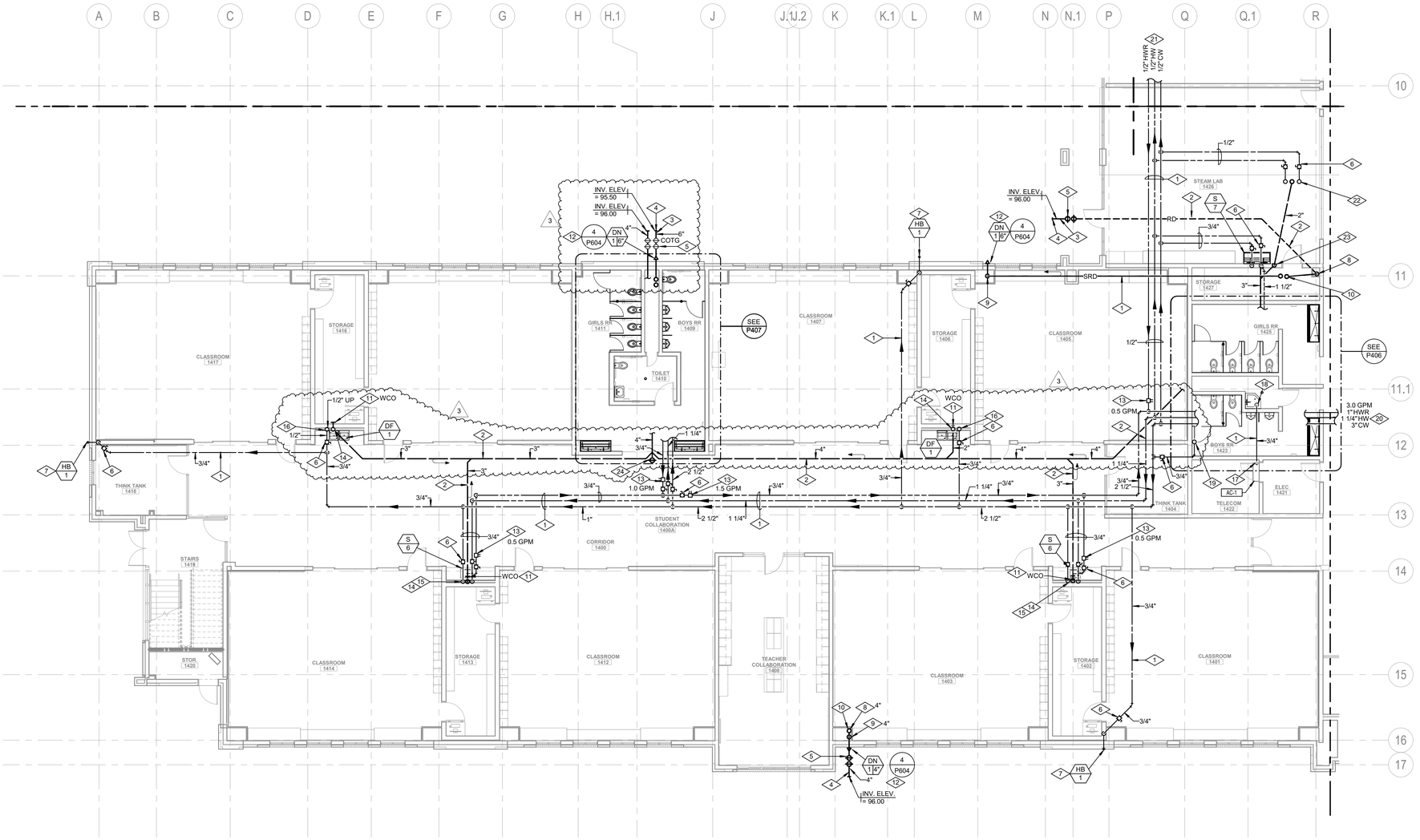
BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING PLAN - LEVEL 01 - AREA 13

2 **P113**



PLUMBING PLAN - LEVEL 01 - AREA 14

0 4' - 0" 8' - 0" 16' - 0"

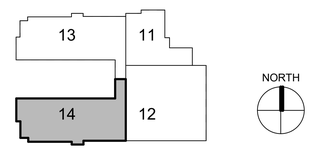
SCALE: 1/8" = 1'-0"

NORTH

REFERENCE NOTES

#	
1	PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2	PIPING TO RUN BELOW FINISHED FLOOR. COORDINATE ROUTING WTIH STRUCTURAL FOOTINGS (TYPICAL).
3	PIPING TO RUN BELOW FINISHED GRADE.
4	EXTEND PIPING 5'-0" BEYOND BUILDING. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH CIVIL DRAWINGS AND SITE UTILITY CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO SITE UTILITIES.
5	DOUBLE CLEANOUT TO GRADE (TYPICAL). SEE DETAIL 6/P602.
6	BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
7	EXTERIOR HOSE BIBB TO BE MOUNTED 18" ABOVE FINISHED GRADE. HOSE BIBB TO BE CENTERED IN BLOCK.
8	PRIMARY ROOF DRAIN DROP TO BELOW FINISHED FLOOR. PROVIDE CLEANOUT AT BASE, 18" ABOVE FINISHED FLOOR. COORDINATE WITH STRUCTURAL FOOTING AND ARCHITECTURAL CHASE LOCATIONS.
9	SECONDARY ROOF DRAIN DROP TO 18" ABOVE FINISHED GRADE OR AS REQUIRED TO LOCATE "DN" IN CENTER OF BLOCK COURSE. COORDINATE WITH ARCHITECTURAL CHASE LOCATIONS.
10	PRIMARY & SECONDARY ROOF DRAIN DROPS FROM FLOOR ABOVE. SEE SHEET P224 FOR CONTINUATION.
11	WALL CLEANOUT (WCO) SEE DETAIL 4/P603.
12	CENTER DN-1 IN BLOCK COURSE. (TYPICAL)
13	CALIBRATED BALANCING VALVE ON HOT WATER RE-CIRCULATING LINE. BALANCE FLOOW TO GPM SHOWN.
14	1 1/2" VENT UP, 1 1/2" WASTE DOWN.
15	1/2" HOT, HOT RECIRC & COLD WATERS UP.
16	1/2" COLD WATER UP.
17	AC CONDENSATE DRAIN LINE. RUN CONCEALED.
18	TERMINATE CONDENSATE INDIRECT AT SS-1.
19	3/4" COLD UP TO FAN ROOM. SEE P224.
20	FOR CONTINUATION OF PIPING SEE SHEET P112.
21	FOR CONTINUATION OF PIPING SEE SHEET P113.
22	1/2" COLD, 1/2" HOT UP. 2" WASTE DOWN.
23	2" WASTE DOWN IN WALL TO BELOW FLOOR.
3/24	FLOOR CLEANOUT. (FCO) SEE DETAIL 5/P602 .

KEY PLAN - MAIN LEVEL



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CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

LICENSED PROFESSIONAL ENGINEER
#334524-2202
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11/8/2023
UTAH

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	11-22-23	Addendum 03
3	01-03-24	RFI #015

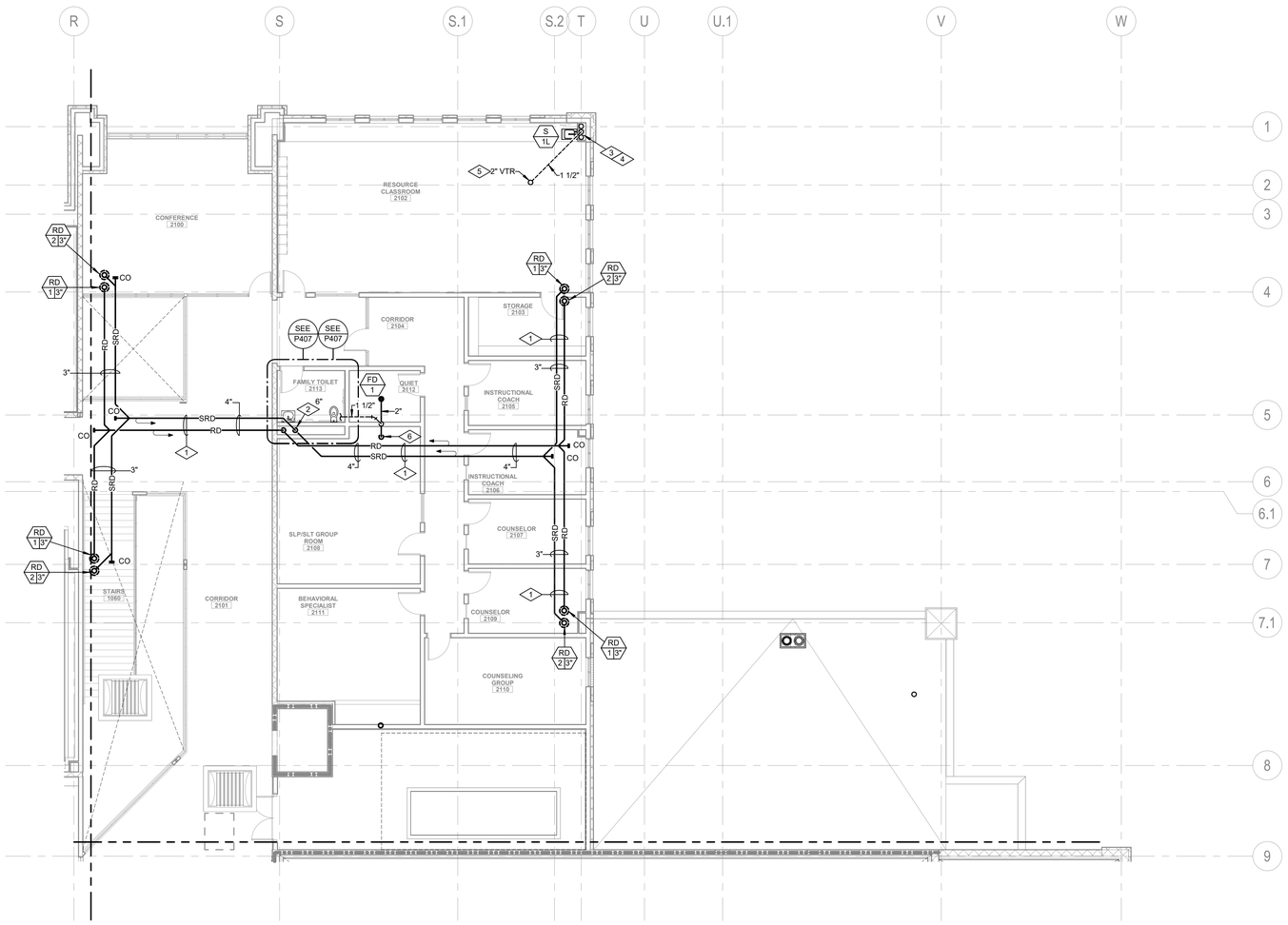
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING PLAN - LEVEL 01 - AREA 14

2 P114



REFERENCE NOTES

1	PIPING TO RUN ABOCE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL)
2	ROOF DRAINS TO DROP BELOW. SEE SHEET P111.
3	1/2" HOT, HOT RE-CIRC & COLD WATERS UP FROM BELOW- SEE SHEET P111.
4	2" WASTE DOWN TO BELOW. SEE SHEET P111.
5	VENT THRU ROOF. (VTR) SEE DETAIL 7/P602.
6	2" DOWN TO FLOOR BELOW. SEE SHEET P407 FOR CONTINUATION.

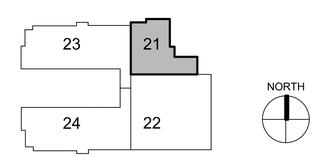
PLUMBING PLAN - LEVEL 02 - AREA 21

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

NORTH

KEY PLAN - UPPER LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

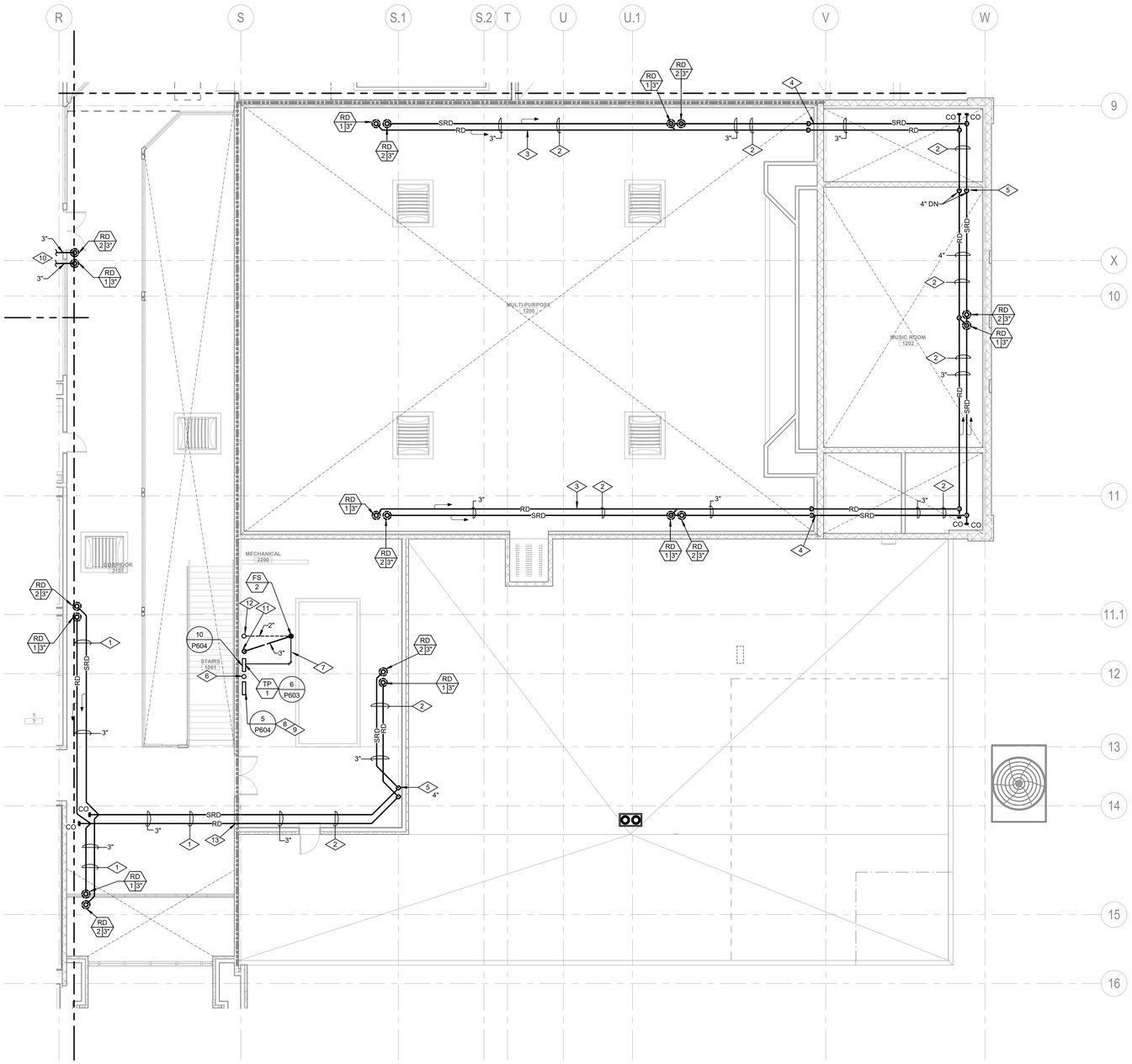
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING PLAN - LEVEL 02 - AREA 21

P221

11/16/2023 11:15:02 AM



PLUMBING PLAN - LEVEL 02 - AREA 22

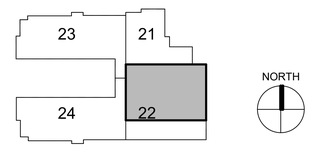
0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. (TYPICAL)
2. PIPING RUNS EXPOSED HIGH & TIGHT AT STRUCTURE. COORDINATE WITH ALL TRADES. (TYPICAL)
3. COORDINATE WITH PARTITION DOOR & STRUCTURE.
4. PROVIDE ESCUTCHEONS AT WALL PENETRATION.
5. ROOF DRAINS DROP TO LEVEL 1. SEE SHEET P112. COORDINATE WITH ARCHITECTURAL CHASE.
6. 3/4" COLD WATER UP FROM BELOW TO SERVE TP-1 & RPBP.
7. 1/2" COLD TO FD-2 TRAP PRIMER CONNECTION.
8. 3/4" COLD TO AHU EVAPORATIVE SECTION INLET. COORDINATE WITH UNIT PROVIDED. PROVIDE A LOCKABLE BALANCING VALVE AT EVAPORTATIVE SECTION. SEE DETAIL 1/P605.
9. MOUNT AT 60" A.F.F.
10. FOR CONTINUATION OF PIPING SEE SHEET P223.
11. 3" WASTE DOWN. SEE SHEET P112.
12. 2" VENT THRU ROOF. PROVIDE AIR ADMITTANCE VALVE W/ ALUMINUM U.V. CAP. SEE DETAIL 2/P605.
13. FIRE SEAL PIPE PENETRATIONS AT BOTH SIDES OF WALL. CORE DRILL WALL. HOLE TO BE SIZED TO ALLOW CONTINUOUS INSULATION (TYPCIAL).

KEY PLAN - UPPER LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

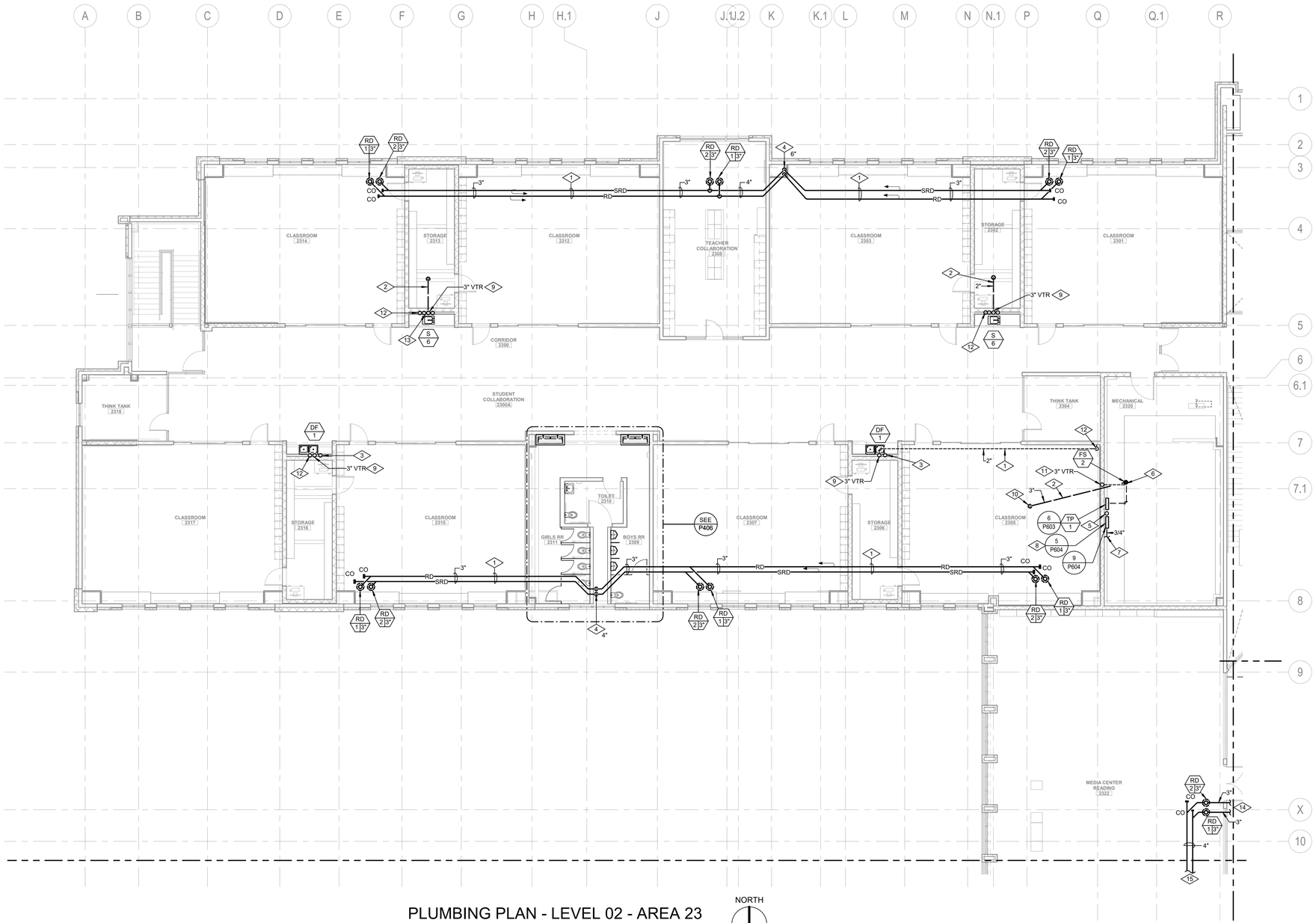
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING PLAN - LEVEL 02 - AREA 22

P222

11/6/2023 5:00:05 PM



PLUMBING PLAN - LEVEL 02 - AREA 23

NORTH

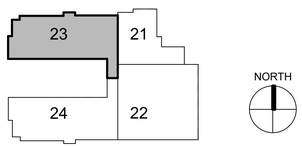
0 4'-0" 8'-0" 16'-0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. (TYPICAL)
2. PIPING RUNS ABOVE LEVEL 1 CEILING.. COORDINATE WITH ALL TRADES. (TYPICAL)
3. 1/2" COLD UP FROM LEVEL 1 TO SERVE DF-1. SEE SHEET P113.
4. ROOF DRAINS DROP TO LEVEL 1. SEE SHEET P113. COORDINATE WITH ARCHITECTURAL CHASE.
5. 3/4" COLD WATER UP FROM BELOW TO SERVE TP-1 & RPBP.
6. 1/2" COLD TO FS-2 TRAP PRIMER CONNECTION.
7. 3/4" COLD TO AHU EVAPORATIVE SECTION INLET. COORDINATE WITH UNIT PROVIDED. PROVIDE A LOCKABLE BALANCING VALVE AT EVAPORTATIVE SECTION. SEE DETAIL 1/P605
8. MOUNT AT 60" A.F.F.
9. VENT THRU ROOF (VTR) SEE DETIL 7/P602.
10. 3" WASTE DOWN. SEE SHEET P113.
11. 2" VENT THRU ROOF. PROVIDE AIR ADMITTANCE VALVE W/ ALUMINUM U.V. CAP. SEE DETAIL 10/P604.
12. VENT UP FROM BELOW. SEE P405.
13. 1/2" HOT, HOT RE-CIRC & COLD WATERS UP FROM BELOW TO SERVE S-6.SEE SHEET P405.
14. FOR CONTINUATION OF PIPING SEE SHEET P222.
15. FOR CONTINUATION OF PIPING SEE SHEET P224.

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION
2	11-22-23	Addendum 03

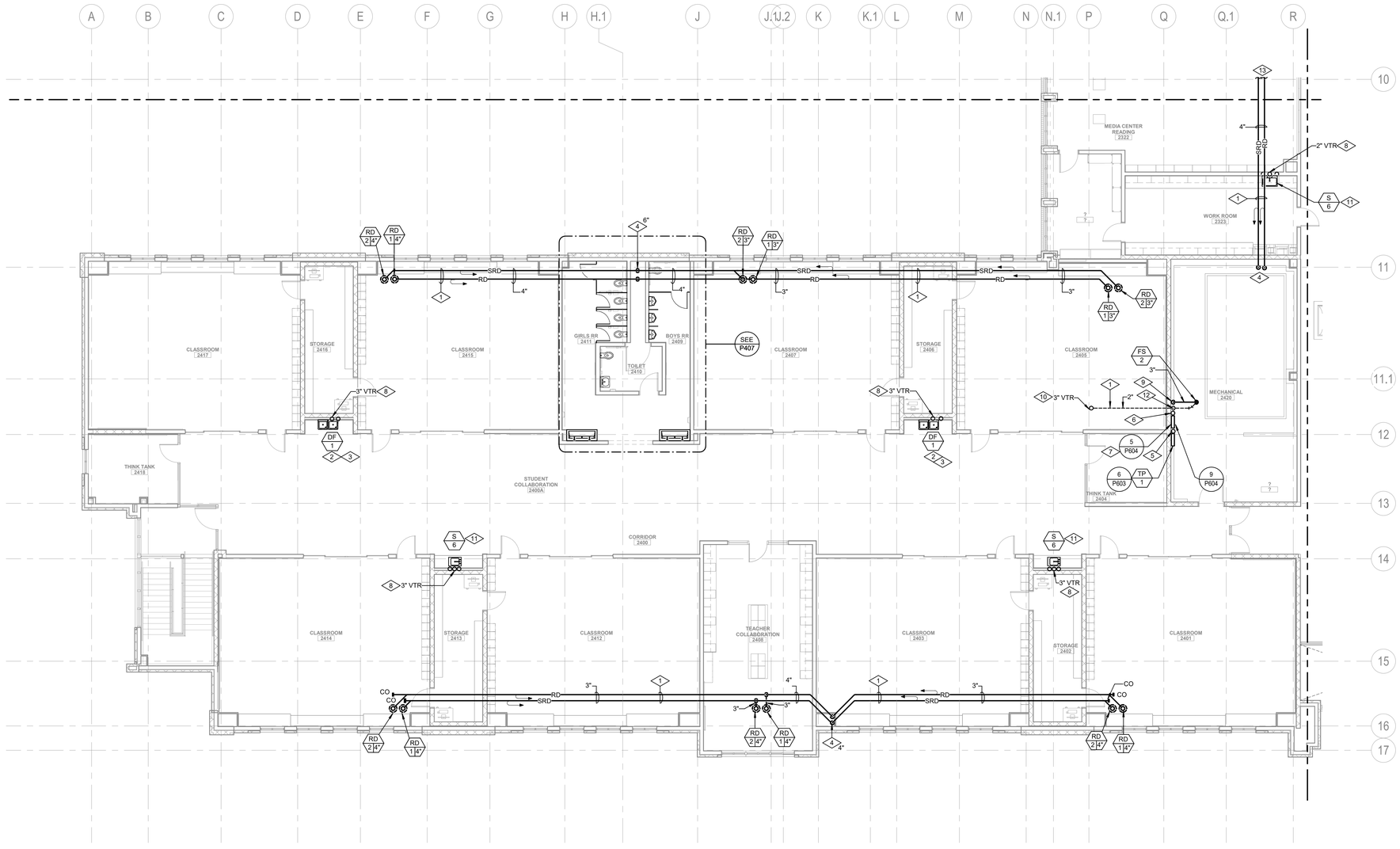
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING PLAN - LEVEL 02 - AREA 23

2 P223



PLUMBING PLAN - LEVEL 02 - AREA 24

NORTH

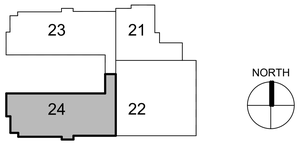
0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES. (TYPICAL)
2. 1/2" COLD UP FROM LEVEL 1 TO SERVE DF-1. SEE SHEET P113.
3. 2" WASTE DOWN. SEE SHEET P405.
4. ROOF DRAINS DROP TO LEVEL 1. SEE SHEET P114. COORDINATE WITH ARCHITECTURAL CHASE.
5. 3/4" COLD WATER UP FROM BELOW TO SERVE TP-1 & RPBP.
6. 3/4" COLD TO AHU EVAPORATIVE SECTION INLET. COORDINATE WITH UNIT PROVIDED. PROVIDE A LOCKABLE BALANCING VALVE AT EVAPORTATIVE SECTION. SEE DETAIL 1/P605
7. MOUNT AT 60" A.F.F.
8. VENT THRU ROOF (VTR) SEE DETIL 7/P602.
9. 3" WASTE DOWN. SEE SHEET P406.
10. 2" VENT THRU ROOF. PROVIDE AIR ADMITTANCE VALVE W/ ALUMINUM U.V. CAP. SEE DETAIL 2/P605.
11. 1/2" HOT, HOT RE-CIRC & COLD WATERS UP FROM BELOW. 2" WASTE DOWN TO SERVE S-6.SEE SHEET P405.
12. FOR CONTINUATION OF PIPING SEE SHEET P223.
13. RISE UP TO ABOVE CEILING.

KEY PLAN - UPPER LEVEL



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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	11-22-23	Addendum 03

OSD HILLCREST ELEMENTARY REBUILD

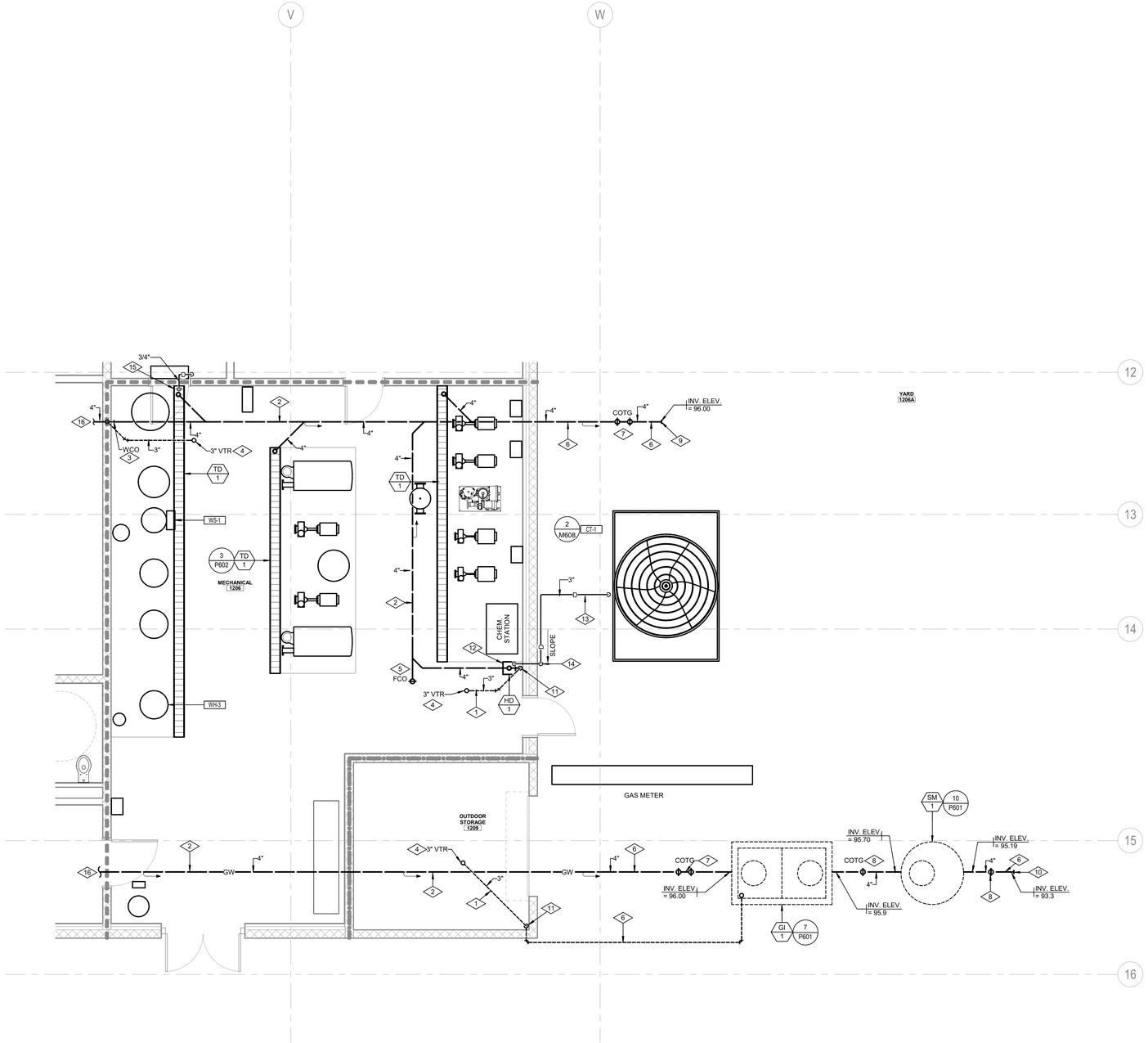
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING PLAN - LEVEL 02 - AREA 24

2 P224

11/22/2023 11:43:22 AM



ENLARGED PLUMBING MECHANICAL PLAN

0 2' - 0" 4' - 0" 8' - 0"

SCALE: 1/4" = 1'-0"

WASTE & VENT

NORTH

REFERENCE NOTES

1. PIPING TO RUN HIGH AT STRUCTURE. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. PIPING TO RUN BELOW FINISHED FLOOR. COORDINATE ROUTING WITH STRUCTURAL FOOTING (TYPICAL).
3. WALL CLEANOUT (WCO) (TYPICAL). DETAIL 4/P603.
4. VENT THRU ROOF (VTR). MAINTAIN A MINIMUM OF 15'-0" FROM ALL OUTSIDE AIR INTAKES. SEE DETAIL 7/P602
5. FLOOR CLEANOUT (FCO) (TYPICAL). SEE DETAIL 5/P602.
6. PIPING TO RUN BELOW FINISHED GRADE. (TYPICAL)
7. DOUBLE CLEANOUT TO GRADE. (COTG) SEE DETAIL 6/P602. (TYPICAL)
8. SINGLE CLEANOUT TO GRADE. (COTG) SEE DETAIL 8/P603. (TYPICAL)
9. EXTEND PIPING 5'-0" BEYOND BUILDING LINE. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH CIVIL DRAWINGS AND SITE UTILITY CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO SITE UTILLITIES.
10. EXTEND PIPING 5'-0" BEYOND SM-1 LINE. COORDINATE EXACT LOCATION AND INVERT ELEVATION WITH CIVIL DRAWINGS AND SITE UTILITY CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO SITE UTILLITIES.
11. RISE TIGHT AT WALL TO RUN HIGH AT STRUCTURE.
12. PIPE 3" DOWN FROM CT-1 INDIRECT TO HD-1.
13. PIPE DRAIN HIGH OVERHEAD. COORDINATE WITH SUPPLY PIPING. SUPPORT AS REQUIRED.
14. SEAL PENETRATION WATERTIGHT.
15. DROP 3/4" CONDENSATE DRAIN FROM AC UNIT INDIRECT TO TD-1.
16. FOR CONTINUATION OF PIPING SEE SHEET P112 & P403.

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LICENSED PROFESSIONAL ENGINEER
#334524-2202
JAMES AUSTIN BERRETT
11/6/2023
UTAH

OLSEN & PETERSON
CONSULTING ENGINEERS, INC.

OGDEN SCHOOL DISTRICT

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OSD HILLCREST ELEMENTARY REBUILD

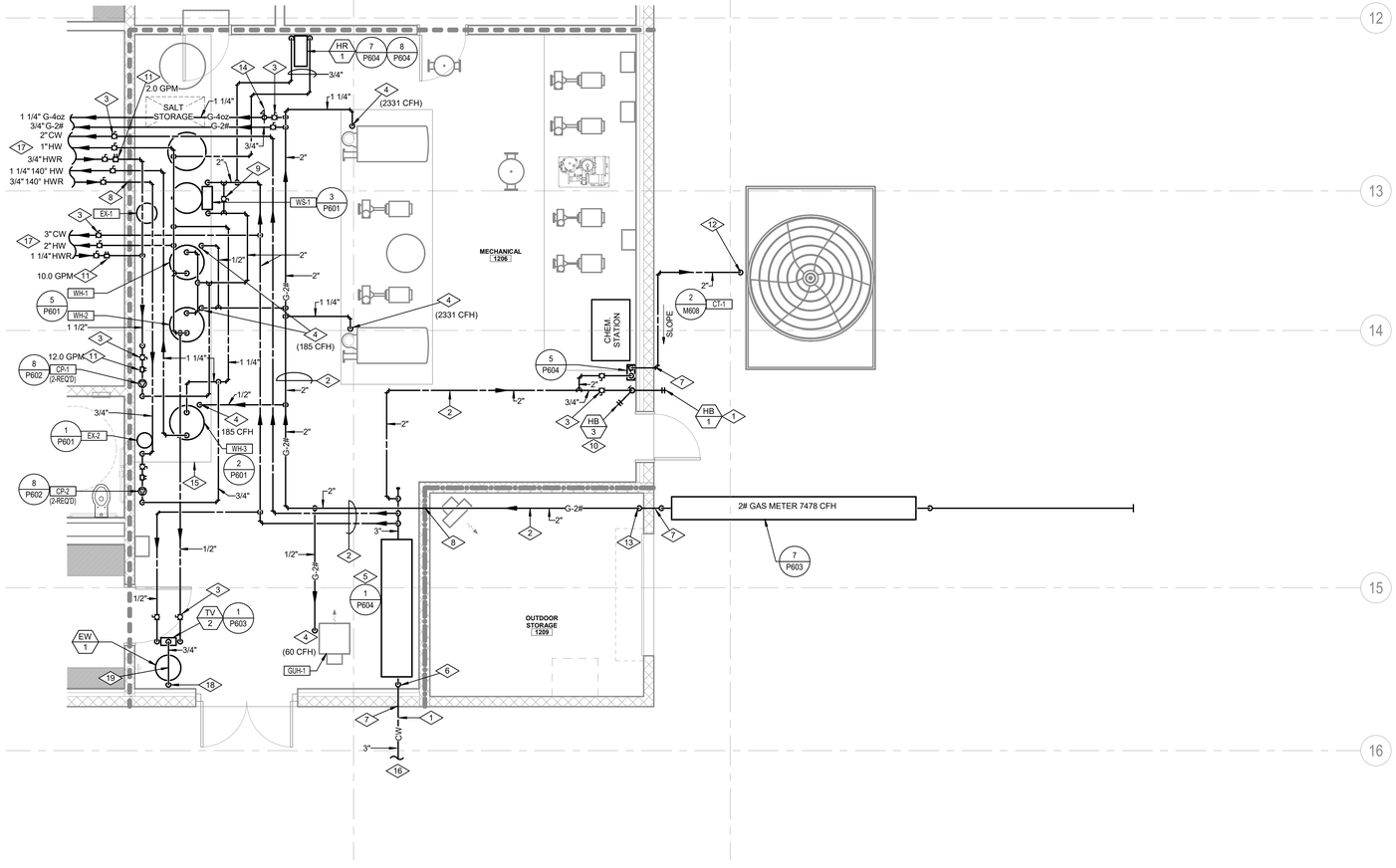
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED MECHANICAL ROOM PLUMBING PLAN

P401

11/6/2023 5:00:17 PM



ENLARGED MECHANICAL ROOM PLUMBING PLAN

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY & GAS

NORTH

REFERENCE NOTES

#	
1	PIPING RUNS BELOW GRADE. COORDINATE ROUTING WITH STRUCTURAL FOOTINGS. (TYPICAL)
2	PIPING TO RUN HIGH AND TIGHT AT STRUCTURE. COORDINATE ROUTING WITH MECHANICAL AND ALL TRADES. (TYPICAL)
3	LINE SIZE BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
4	GAS CONNECTION TO EQUIPMENT. SEE DETAIL 3/P603.
5	MAIN WATER PRESSURE REDUCING STATION.
6	RISE UP FROM BELOW FLOOR. SLEEVE PENETRATION.
7	SEAL PENETRATION AT WALL WATER TIGHT.
8	FIRE CAULK ALL PENETRATIONS AT FIRE WALL. (TYPICAL)
9	LINE SIZE BALL VALVE AND BY-PASS.
10	MOUNT AT 60" AFF.
11	CIRCUIT SETTER IN HOT RECIRCULATING LINE. BALANCE TO GPM SHOWN.
12	2" WATER TP TOWER FROM RPBP. INSULATE & PROVIDE ALUMINUM JACKETING.
13	RISE AND RUN HIGH AT STRUCTURE.
14	2#/4 OZ. GAS PRESSURE REGULATOR. VENT AS REQUIRED. 4 OZ. SERVES KITCHEN UDS.
15	4" CONCRETE HOUSEKEEPING PAD. (TYPICAL)
16	FOR CONTINUATION OF PIPING SEE SHEET P112.
17	FOR CONTINUATION OF PIPING SEE SHEET P404.
18	PIPE EXPOSED ON WALL. INSULATE WITH PVC JACKET.
19	PIPE DRAIN TO 18" OFF FLOOR.

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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

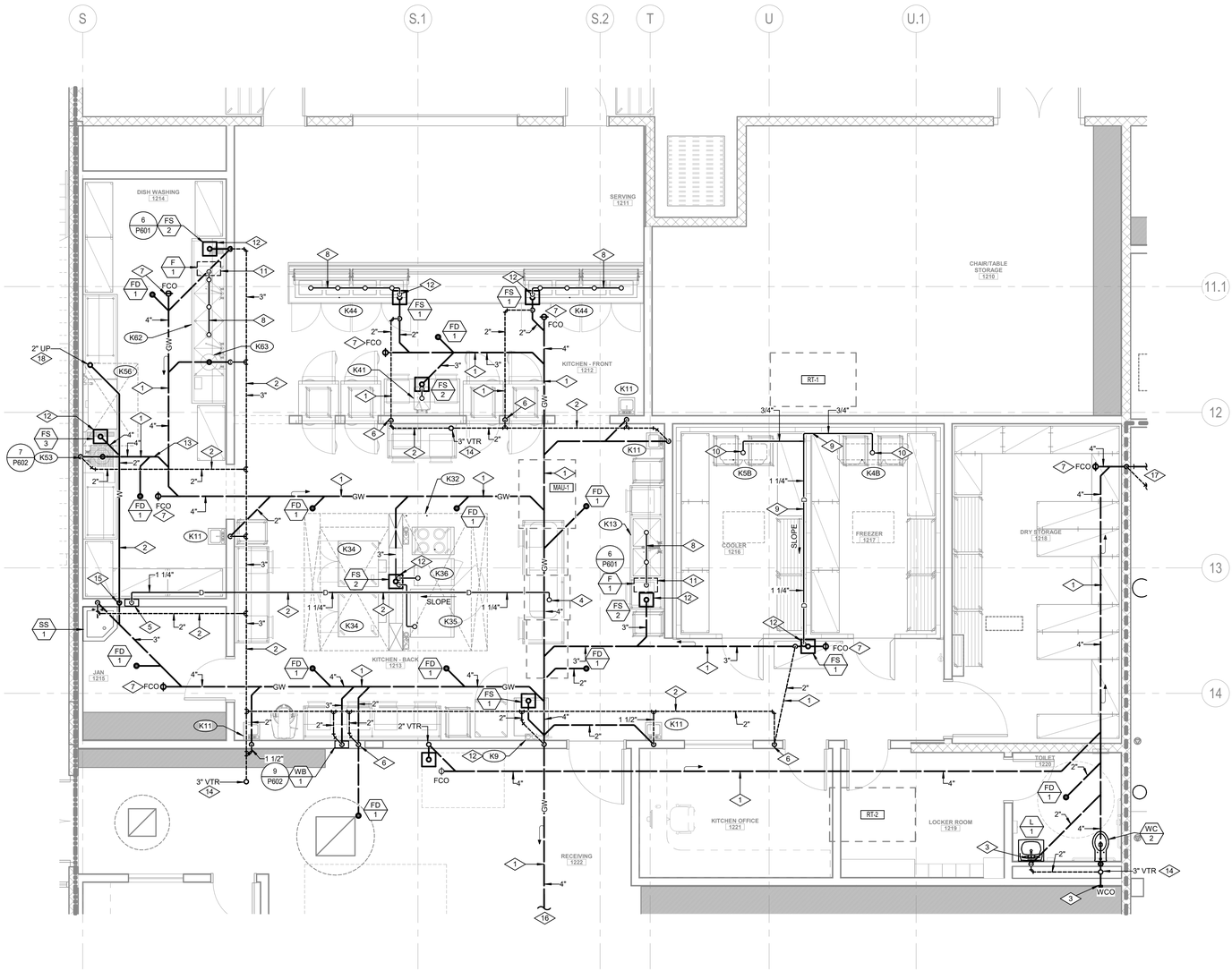
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED MECHANICAL ROOM PLUMBING PLAN

P402

11/8/2023 5:00:21 PM



ENLARGED PLUMBING PLAN - KITCHEN

0 2' - 0" 4' - 0" 8' - 0"

SCALE: 1/4" = 1'-0"

WASTE & VENT

NORTH

REFERENCE NOTES

1. PIPING TO RUN BELOW SLAB (TYPICAL).
2. PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH MECHANICAL DUCTWORK AND ALL OTHER TRADES.
3. WALL CLEANOUT (WCO). SEE DETAIL 4/P603.
4. DRAIN CONNECTION TO MUA-1.
5. DRAIN TO STOP & WASTE. SEE DETAIL 2/P604.
6. PIPING TO RISE UP IN WALL TO ABOVE CEILING.
7. FLOOR CLEANOUT. (FCO) SEE DETAIL, 5/P602.
8. PIPING TO RUN HIGH AND TIGHT BELOW COUNTER.
9. DRAIN PIPING FROM REFRIGERATION UNITS TO RUN TO FLOOR SINK. PIPING TO RUN TIGHT AT WALL. SEAL WALL PENETRATIONS. HEAT TAPE AND INSULATION REQUIRED.
10. DRAIN LINE CONNECTION TO REFRIGERATION EQUIPMENT SEE KITCHEN EQUIPMENT DRAWINGS FOR EXACT LOCATIONS.
11. PIPE INDIRECT TO FILTER SYSTEM.
12. PIPE DRAINS INDIRECT TO FLOOR SINK IN DWV COPPER. VERIFY EXACT CONNECTION SIZES WITH KITCHEN EQUIPMENT PLAN. (TYPICAL)
13. WASTE PIPING TO BE CAST IRON OR HIGH TEMPERATURE HDPE FROM K56 DRAIN TO MAIN.
14. VENT THRU ROOF (VTR) MAINTAIN A MINIMUM OF 15'-0" FROM ALL O.A. INTAKES. SEE DETAIL 7/P602.
15. WASTE TO DROP TO BELOW FLOOR.
16. FOR CONTINUATION OF PIPING SEE SHEET P112.
17. FOR CONTINUATION OF PIPING SEE SHEET P401.
18. 2" WASTE DOWN FROM ABOVE. SEE SHEET P112 FOR CONTINUATION.

SEE SHEET P501 FOR
KITCHEN EQUIPMENT SCHEDULE

NOTE TO CONTRACTOR:
PRIOR TO POURING THE KITCHEN AND SERVING AREA FLOOR SLABS, PLEAN PROVIDE A WRITTEN REPORT INCLUDING A UTILITY SURVEY DOCUMENTING THAT THE BELOW SLAB UTILITY ROUGH- IN LOCATIONS CONFORM TO THE PLACEMENT REQUIREMENTS OUTLINED IN THE FOOD SERVICE SHEETS.

THIS IS TO ENSURE THE FLOOR DRAINS, FLOOR SINKS, ETC, ARE ROUGHED IN AS DIMENSIONED IN THE FOOD SERVICE PLANS, AND ARE PROPERLY PLACED IN RELATION TO THE EQUIPMENT THEY SERVE.

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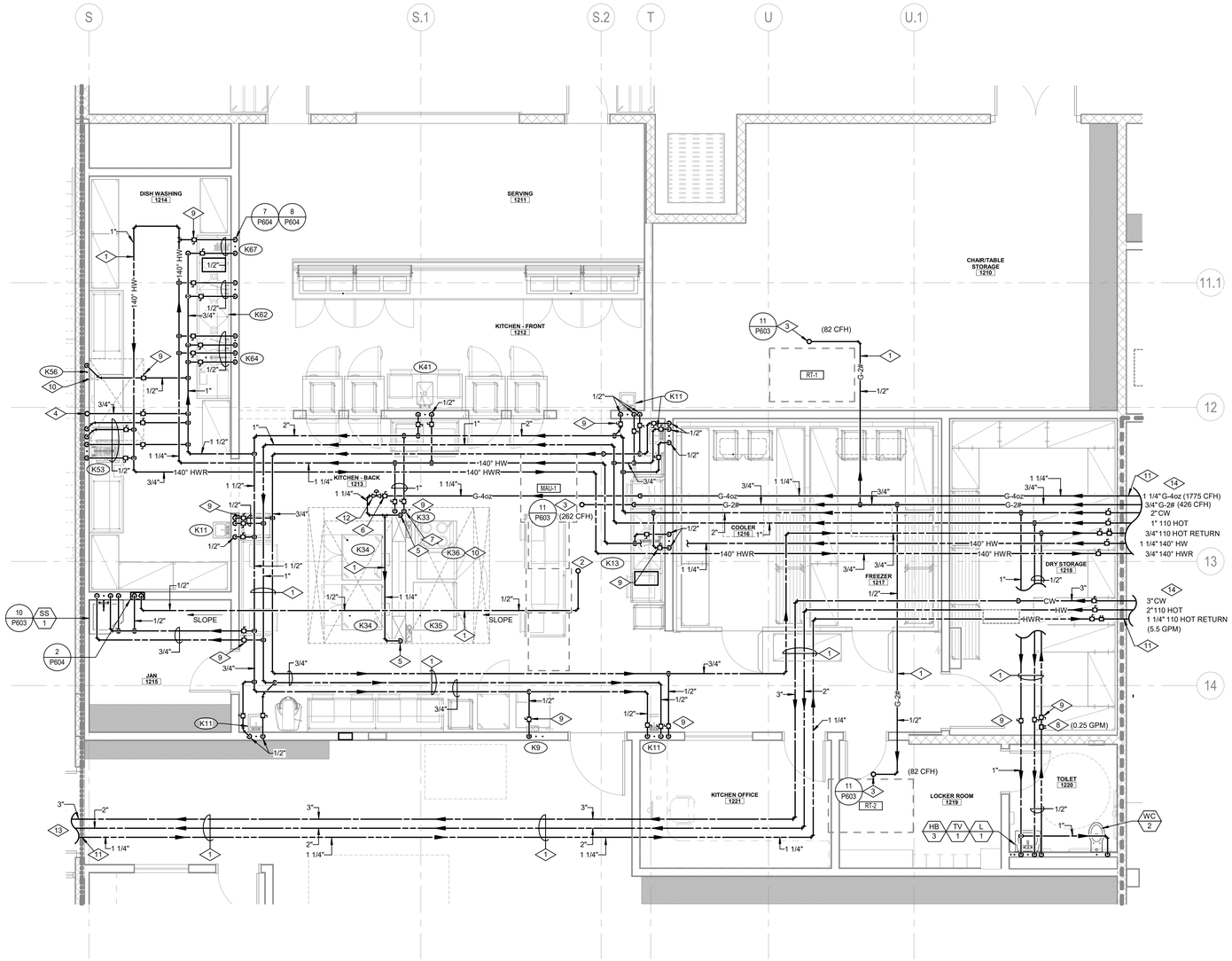
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED KITCHEN PLUMBING PLAN

P403

11/6/2023 5:21:09 PM



ENLARGED PLUMBING PLAN - KITCHEN

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY & GAS

NORTH

REFERENCE NOTES

#	
1	PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH MECHANICAL DUCTWORK AND ALL OTHER TRADES.
2	1/2" WATER SUPPLY UP TO MAKE-UP AIR UNIT. COORDINATE WITH MECHANICAL.
3	2# GAS (CFH) UP TO MECHANICAL UNIT. PIPE FILL & DRAIN KITS PER MANUFACTURE REQUIREMENTS. COORDINATE WITH MECHANICAL.
4	3/4" COLD WATER UP TO ABOVE. SEE SHEET P112.
5	1-1/4" 4oz (1775 CFH) GAS PIPING DROP TO UDS SYSTEM.
6	GAS RATED BALL VALVE (TYPICAL). INSTALL ABOVE LAY-IN CEILING IN AN ACCESSIBLE LOCATION.
7	1" COLD WATER & 140 HOTWATER TO UDS SYSTEM K33.
8	CIRCUIT SETTER IN HOT WATER RE-CIRCULATING LINE. BALANCE TO GPM SHOWN.
9	LINE SIZE BALL VALVE. LOCATE IN AN ACCESSIBLE LOCATION (TYPICAL).
10	INSTALL TEMPERING KIT PROVIDED WITH K36 & K56.
11	FIRE CAULK PENETRATIONS AT RATED WALLS (TYPICAL).
12	AUTOMATIC GAS VALVE. PROVIDED BY KITCHEN EQUIPMENT CONTRACTOR. INSTALLED BY PLUMBING CONTRACTOR. INSTALL ABOVE LAY-IN CEILING IN AN ACCESSIBLE LOCATION.
13	FOR CONTINUATION OF PIPING SEE SHEET P112.
14	FOR CONTINUATION OF PIPING SEE SHEET P402.

SEE SHEET P501 FOR
KITCHEN EQUIPMENT SCHEDULE

NOTE TO CONTRACTOR:
PRIOR TO POURING THE KITCHEN AND SERVING AREA FLOOR SLABS, PLEAN PROVIDE A WRITTEN REPORT INCLUDING A UTILITY SURVEY DOCUMENTING THAT THE BELOW SLAB UTILITY ROUGH- IN LOCATIONS CONFORM TO THE PLACEMENT REQUIREMENTS OUTLINED IN THE FOOD SERVICE SHEETS.

THIS IS TO ENSURE THE FLOOR DRAINS, FLOOR SINKS, ETC, ARE ROUGHED IN AS DIMENSIONED IN THE FOOD SERVICE PLANS, AND ARE PROPERLY PLACED IN RELATION TO THE EQUIPMENT THEY SERVE.

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SALT LAKE CITY, UT 84102
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VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

LICENSED PROFESSIONAL ENGINEER
#334524-2202
JAMES AUSTIN BERRETT
11/6/2023
UTAH

OLSEN & PETERSON
CONSULTING ENGINEERS, INC.
10 East 2700 South, Salt Lake City, UT 84115
Phone: (801) 486-8446 Fax: (801) 487-0301

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

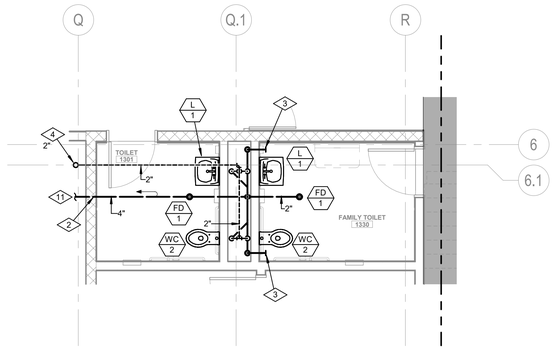
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED KITCHEN PLUMBING PLAN

P404

11/6/2023 5:00:36 PM



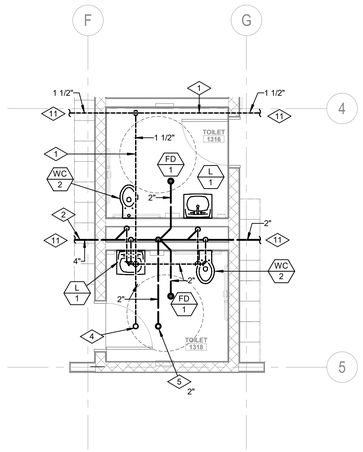
ENLARGED PLUMBING PLAN

NORTH

0 2' - 0" 4' - 0" 8' - 0"

WASTE & VENT

SCALE: 1/4" = 1'-0"



ENLARGED PLUMBING PLAN

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WASTE & VENT

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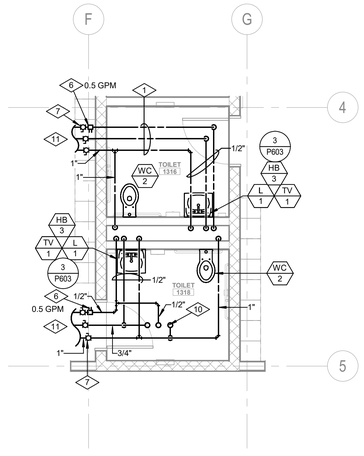
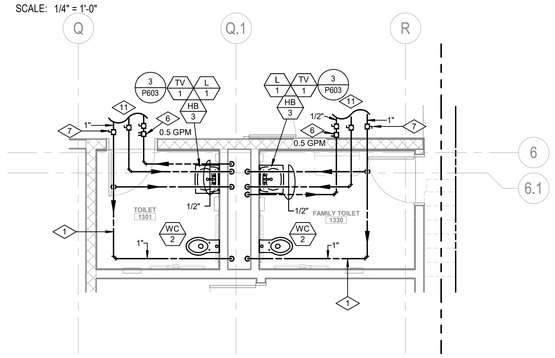


ENLARGED PLUMBING PLAN

NORTH

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY

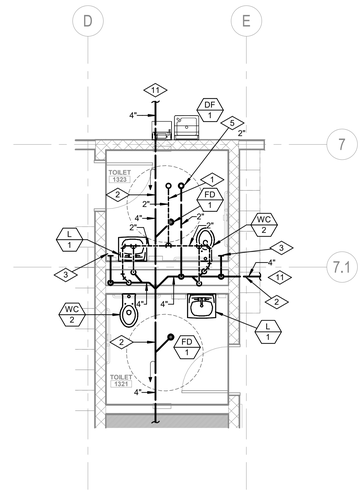


ENLARGED PLUMBING PLAN

NORTH

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY



ENLARGED PLUMBING PLAN

NORTH

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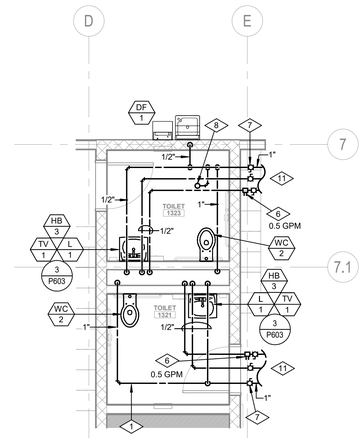
WASTE & VENT

SCALE: 1/4" = 1'-0"

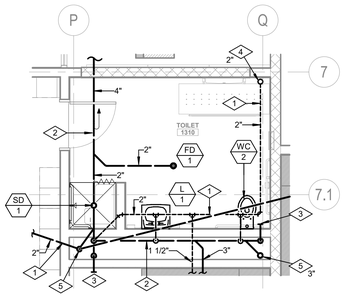


ENLARGED PLUMBING PLAN

NORTH

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY



ENLARGED PLUMBING PLAN

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WASTE & VENT

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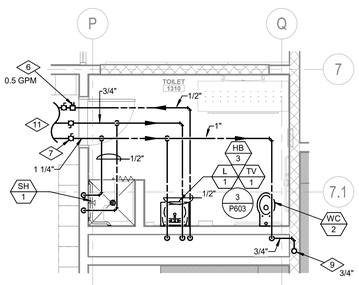
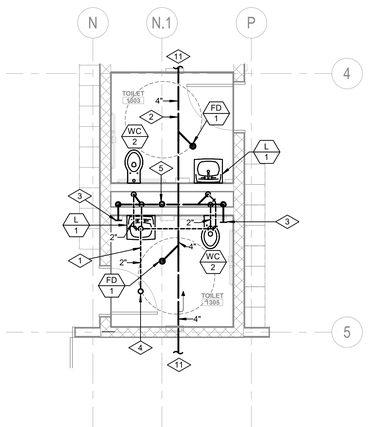


ENLARGED PLUMBING PLAN

NORTH

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY



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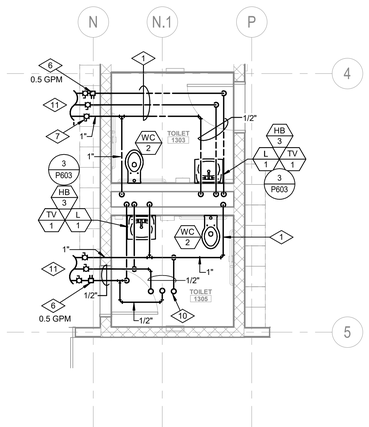

ENLARGED PLUMBING PLAN

NORTH

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY

REFERENCE NOTES

#	
1	PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2	PIPING TO RUN BELOW FINISHED FLOOR. COORDINATE ROUTING WITH STRUCTURAL FOOTING (TYPICAL).
3	WALL CLEANOUT (WCO) (TYPICAL). SEE DETAIL 3/P602.
4	VENT UP TO ABOVE.
5	WASTE FROM ABOVE TO BELOW FLOOR.
6	CALIBRATED BALANCING VALVE ON HOT WATER RECIRCULATING LINE. BALANCE FLOW TO GPM SHOWN.
7	BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
8	1/2" COLD UP TO SERVE DF-1. SEE SHEET P223.
9	3/4" COLD WATER UP TO ABOVE. SEE SHEET P223.
10	1/2" COLD WATER, 1/2" HOT WATER, & 1/2" HOT WATER RECIRC UP TO FLOOR ABOVE TO SERVE SINK S-6. SEE SHEET P223 FOR CONTINUATION.
11	FOR CONTINUATION OF PIPING SEE SHEET P113.

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VCBO NUMBER: 22785
CLIENT NUMBER: -
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10 East 2700 South, Salt Lake City, UT 84115
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OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

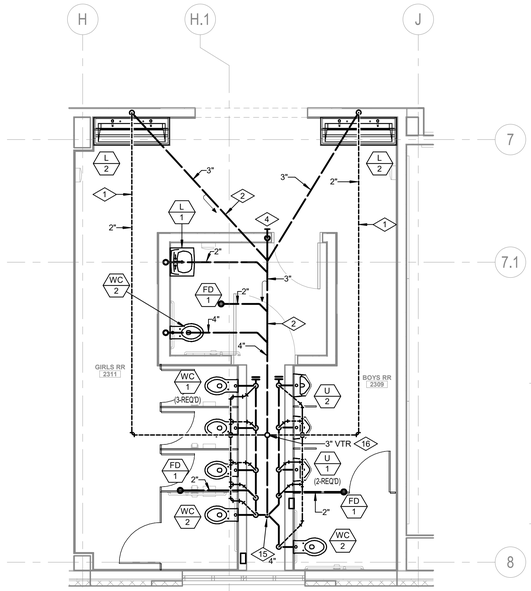
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLUMBING PLAN

P405

11/6/2023 5:00:46 PM



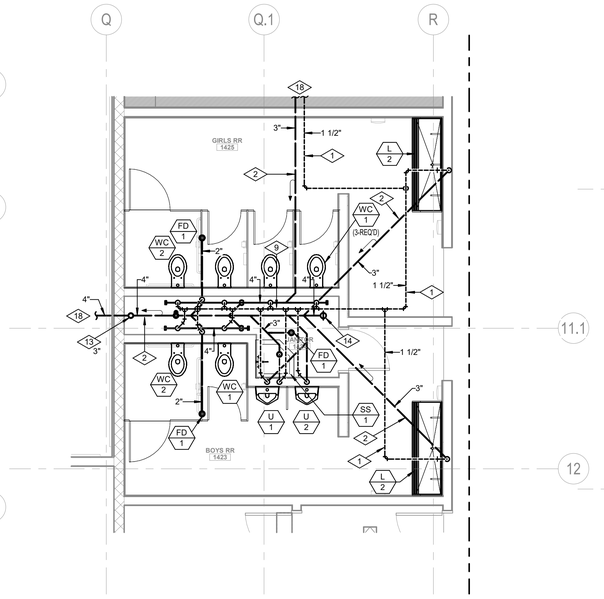
ENLARGED PLUMBING PLAN - LEVEL 02

0 2' - 0" 4' - 0" 8' - 0"

SCALE: 1/4" = 1'-0"

WASTE & VENT

NORTH



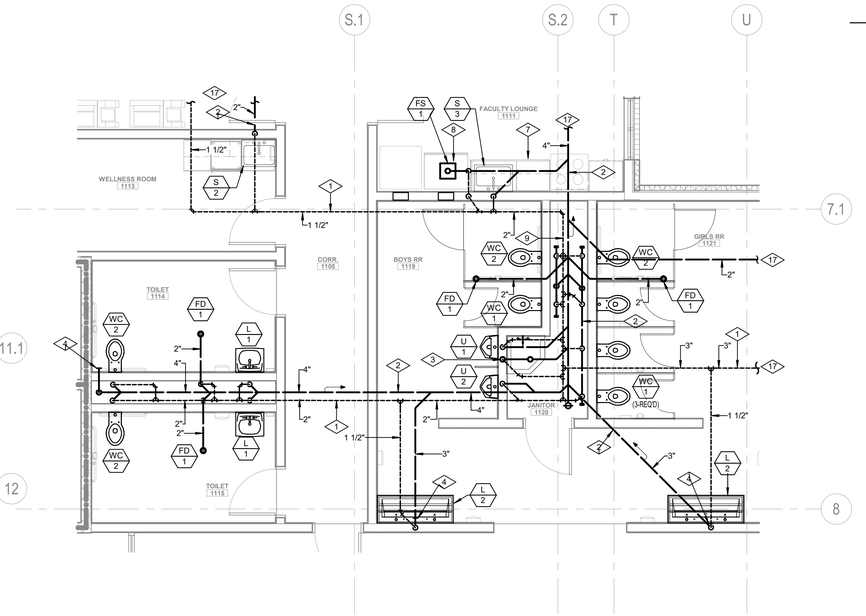
ENLARGED PLUMBING PLAN

0 2' - 0" 4' - 0" 8' - 0"

SCALE: 1/4" = 1'-0"

WASTE & VENT

NORTH



ENLARGED PLUMBING PLAN

0 2' - 0" 4' - 0" 8' - 0"

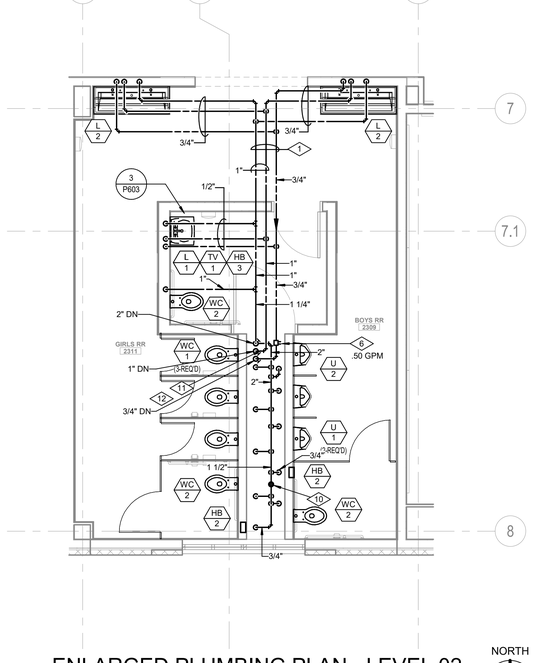
SCALE: 1/4" = 1'-0"

WASTE & VENT

NORTH

REFERENCE NOTES

1. PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2. PIPING TO RUN BELOW FINISHED FLOOR. COORDINATE ROUTING WITH STRUCTURAL FOOTINGS (TYPICAL).
3. VENT RISE FROM BELOW FLOOR TO AS HIGH AS POSSIBLE.
4. WALL CLEANOUT (WCO) (TYPCIAL). SEE DETAIL 3/P602.
5. BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
6. CALIBRATED BALANCING VALVE ON HOT WATER RECIRCULATING LINE. BALANCE FLOW TO GPM SHOWN.
7. UNDERCOUNTER DISHWASHER PROVIDE WATER AND WASTE ROUGH-IN. MAKE ALL FINAL CONNECTIONS.
8. TERMINATE ICE MAKER DRAIN INDIRECT AT FLOOR SINK LOCATED BELOW ICE MAKER.
9. PIPING IN CHASE TO BE A MINIMUM OF 7'-0" AFF.
10. WATER HAMMER ARRESTOR.
11. VERTICAL LINE SIZE BALL VALVE INSTALLED AT 80" AFF. (TYPICAL)
12. PIPING UP FROM BELOW. SEE SHEET P113.
13. 3" WASTE DOWN FROM ABOVE TO BELOW FLOOR. SEE SHEET P224.
14. FLOOR CLEANOUT. (FCO) SEE DETAIL 5/P602.
15. 4" WASTE DOWN. SEE SHEET P113.
16. VENT THRU ROOF, (VTR) SEE DETAIL 7/P602.
17. FOR CONTINUATION OF PIPING SEE SHEET P111.
18. FOR CONTINUATION OF PIPING SEE SHEET P114.

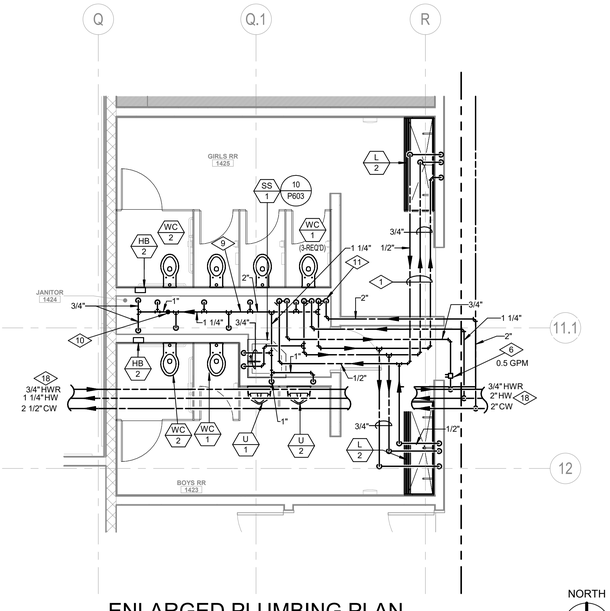


ENLARGED PLUMBING PLAN - LEVEL 02

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY

NORTH



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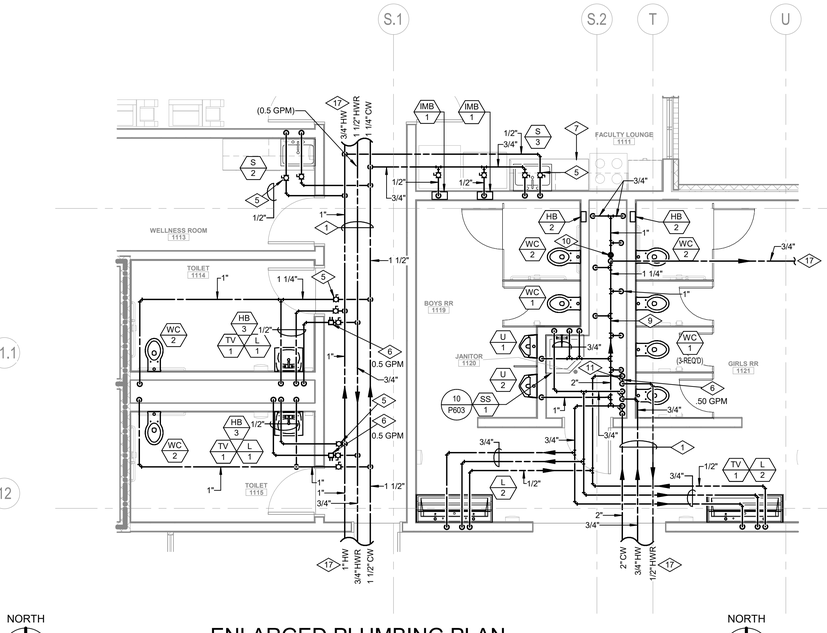
WATER SUPPLY

NORTH



ENLARGED PLUMBING PLAN

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY

NORTH

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VCBO NUMBER: 22785
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LICENSED PROFESSIONAL ENGINEER #334524-2202 JAMES AUSTIN BERRETT 11/8/2023 UTAH

OLSEN & PETERSON
consulting engineers, inc.

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
2	11-22-23	Addendum 03

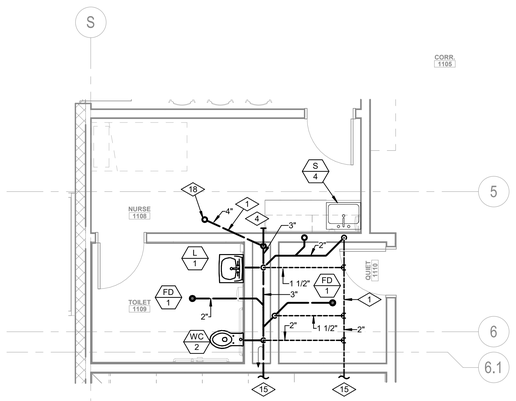
OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLUMBING PLAN

2 P406



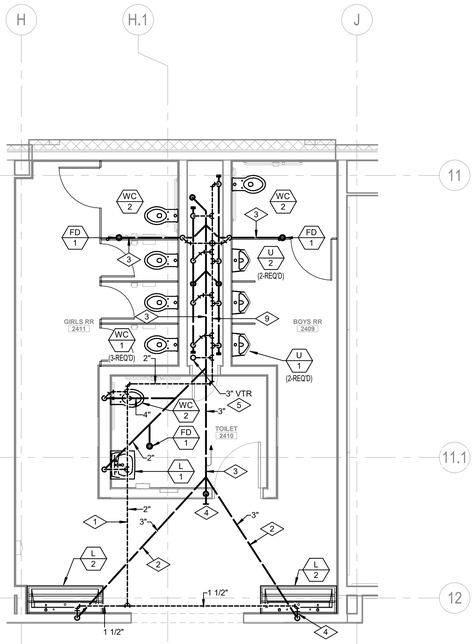
ENLARGED PLUMBING PLAN

NORTH

0 2' - 0" 4' - 0" 8' - 0"

WASTE & VENT

SCALE: 1/4" = 1'-0"



ENLARGED PLUMBING PLAN - LEVEL 02

NORTH

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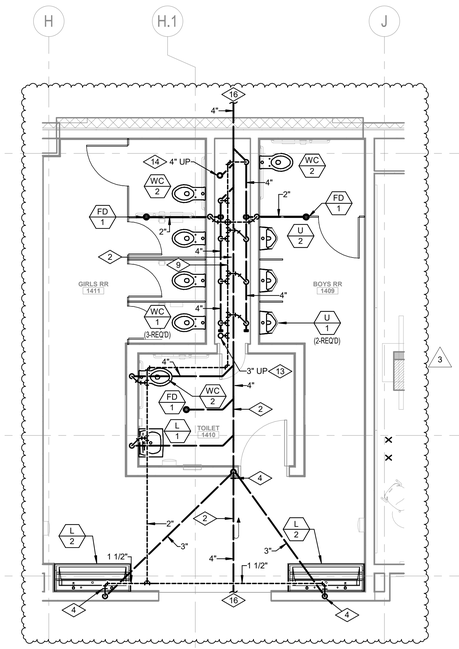
WASTE & VENT

SCALE: 1/4" = 1'-0"



ENLARGED PLUMBING PLAN - LEVEL 01

NORTH

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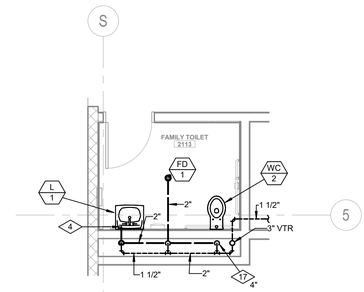
WASTE & VENT

SCALE: 1/4" = 1'-0"



ENLARGED PLUMBING PLAN - LEVEL 02

NORTH

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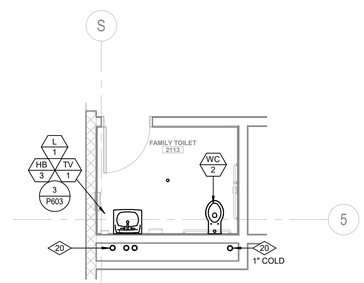
WASTE & VENT

SCALE: 1/4" = 1'-0"

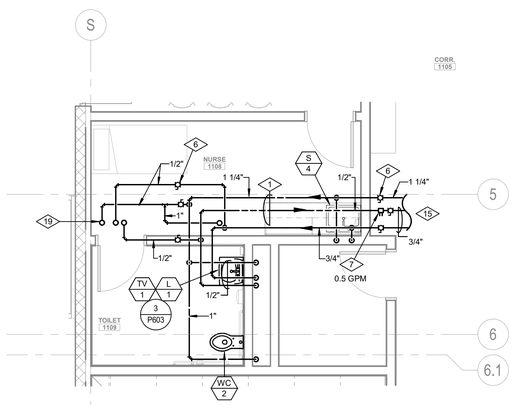


ENLARGED PLUMBING PLAN - LEVEL 02

NORTH

0 2' - 0" 4' - 0" 8' - 0"

WATER SUPPLY



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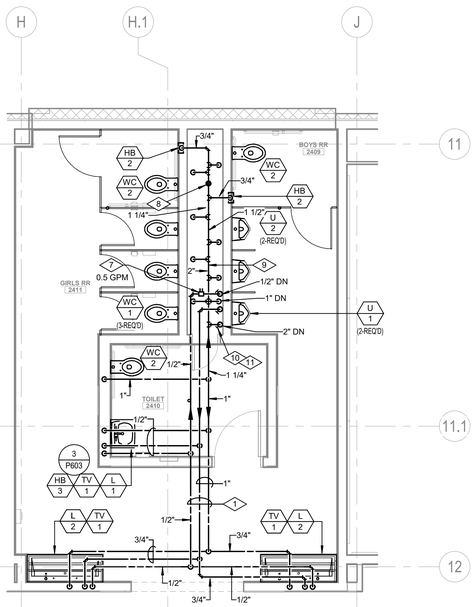
WATER SUPPLY



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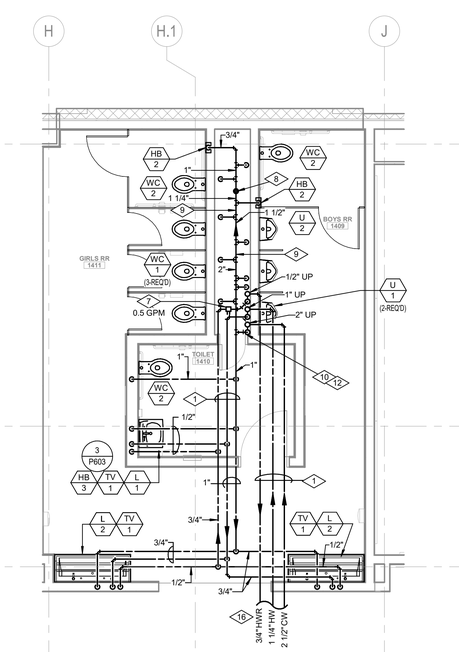
WATER SUPPLY



ENLARGED PLUMBING PLAN - LEVEL 01

NORTH

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WATER SUPPLY

REFERENCE NOTES

#	
1	PIPING TO RUN ABOVE CEILING. COORDINATE ROUTING WITH ALL TRADES (TYPICAL).
2	PIPING TO RUN BELOW FINISHED FLOOR. COORDINATE ROUTING WITH STRUCTURAL FOOTINGS (TYPICAL).
3	PIPING TO RUN BELOW FLOOR. COORDINATE ROUTING WITH STRUCTURE AND ALL TRADES.
4	WALL CLEANOUT (WCO) (TYPICAL). SEE DETAIL 3/P602.
5	VENT THRU ROOF (VTR). MAINTAIN A MINIMUM OF 15'-0" FROM ALL OUTSIDE AIR INTAKES. SEE DETAIL 7/P602.
6	BALL VALVE (TYPICAL). VALVE MUST BE ACCESSIBLE.
7	CALIBRATED BALANCING VALVE ON HOT WATER RECIRCULATING LINE. BALANCE FLOW TO GPM SHOWN.
8	WATER HAMMER ARRESTOR.
9	PIPING IN CHASE TO BE A MINIMUM OF 7'-0" AFF.
10	VERTICAL LINE SIZE BALL VALVE INSTALLED AT 80" AFF. (TYPICAL)
11	WATERS UP FROM BELOW. SEE ENLARGED PLAN THIS SHEET. 2" COLD, 1" HOT, 3/4" RE-CIRCULATING.
12	WATERS UP TO ABOVE. SEE ENLARGED PLAN THIS SHEET. 2" COLD, 1" HOT, 3/4" HOT RE-CIRCULATING.
13	3" VENT UP TO ABOVE. SEE ENLARGED PLAN THIS SHEET.
14	4" VENT UP TO ABOVE. SEE ENLARGED PLAN THIS SHEET.
15	FOR CONTINUATION OF PIPING SEE SHEET P111.
16	FOR CONTINUATION OF PIPING SEE SHEET P114.
17	4" WASTE DOWN TO BELOW. SEE ENLARGED PLAN SHEET P407.
18	4" WASTE DOWN FROM ABOVE.
19	WATERS UP TO ABOVE. 1" COLD, 1/2" HOT , 1/2" HOT RE-CIRC.
20	WATERS UP FROM ABOVE.

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11/6/2023
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OLSEN & PETERSON
CONSULTING ENGINEERS, INC.

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION
3	01-03-24	RFI #015

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

ENLARGED PLUMBING PLAN

P407

1/3/2024 11:50:22 AM

KITCHEN EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION	WATER			WASTE		GAS		NOTES (1)(2)(3)
		CW	HW		D	ID	SIZE	MBH	
K4B	FREEZER EVAPORATOR	--	--	--	--	3/4"	--	--	DRAIN INDIRECT TO FLOOR SINK
K5B	COOLER EVAPORATOR	--	--	--	--	3/4"	--	--	DRAIN INDIRECT TO FLOOR SINK
K9	ICE MAKER	1/2"	--	--	--	2"	--	--	PIPE FITTER DRAIN TO FLOOR SINK (3)
K11	HAND SINK	1/2"	1/2"	--	1-1/2"	--	--	--	ADA INSULATION KIT REQUIRED
K13	2-COMPARTMENT SINK	--	--	--	--	2"	--	--	DRAIN INDIRECT TO F-1, SEE 6/P601
K14	FILL FAUCET	1/2"	--	1/2"	--	--	--	--	--
K33	UTILITY DISTRIBUTION SYSTEM	1"	--	1'	--	4"	1904	1-1/4" 4OZ	--
K34	STACKED CONVECTION OVEN	--	--	--	--	--	100	3/4"	PIPE FROM UDS K33
K35	COMBI OVEN - STEAMER	--	--	--	--	2"	--	--	PIPE INDIRECT TO FLOOR SINK
K35	COMBI OVEN	(2) 3/4"	--	--	--	1"	(2) 106.5	(2) 3/4"	DRAIN INDIRECT TO FLOOR SINK (4)
K36	CONVECTION STEAMER	1"	--	--	--	1-1/2"	144	3/4"	PIPE FROM UDS K33 DRAIN INDIRECT TO FLOOR SINK (4)
K41	UTILITY SINK	1/2"	--	1/2"	--	2"	--	--	DRAIN INDIRECT TO FLOOR SINK
K44	HOT/COLD/FROZEN FOOD PAN	--	--	--	--	2"	--	--	DRAIN INDIRECT TO FLOOR SINK
K56	DISH WASHER	(2) 1/2"	--	1/2"	--	2"	--	--	DRAIN TO FLOOR SINK
K69	HOSE REEL	1/2"	--	1/2"	--	--	--	--	-- (5)
K62	4-COMPARTMENT SINK	(2) 1/2"	--	(2) 1/2"	--	(4) 1/2"	--	--	DRAIN INDIRECT TO F-1, SEE 6/P601
K63	DISH DISPOSER	1/2"	--	--	2"	--	--	--	--
K64	PRE-RINSE FAUCET	1/2"	--	1/2"	--	--	--	--	--

NOTES:

(1) PLUMBING CONTRACTOR TO ROUGH-IN & MAKE COMPLETE FINAL CONNECTIONS TO ALL EQUIPMENT FROM U.D.S. SYSTEM AS LISTED IN THE KITCHEN EQUIPMENT SCHEDULE INCLUDING STOPS & UNIONS ON ALL H.W., C.W. & GAS LINE CONNECTIONS.

(2) ALL EXPOSED WASTE AND DRAIN PIPING & FITTINGS SHALL BE DWV COPPER.

(3) PLUMBER TO INSTALL RO FILTER PROVIDED BY KITCHEN EQUIPMENT SUPPLIER.

(4) PIPE (2) 1/2" COLDS PIPE TEMPERING KIT TO INDIRECT DRAIN.

(5) HOT & COLD FROM FPBP. SEE DETAIL 7/P604 & 8/P604.

PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE	WASTE	VENT	C.W.	H.W.	TEMP. W.	NOTES (1)
WC 1	WATER CLOSET	4"	2"	1"	--	--	WALL MOUNTED - SENSOR FLUSH VALVE
WC 2	WATER CLOSET	4"	2"	1"	--	--	WALL MOUNTED - SENSOR FLUSH VALVE (ADA)
U 1	URINAL	3"	2"	1"	--	--	WALL MOUNTED - SENSOR FLUSH
U 2	URINAL	3"	2"	1"	--	--	COUNTER MOUNTED - SENSOR FLUSH (ADA)
L 1	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	1/2"	WALL MOUNTED - (ADA) W/ASSE TV-1
L 2	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	--	3-STATION LAV SYSTEM - (ADA) W/SENSOR FAUCET & ASSE TV-1
S 1L	SINK	1-1/2"	1-1/2"	1/2"	1/2"	--	COUNTER MOUNTED W/ LH BUBBLER (2)
S 1R	SINK	1-1/2"	1-1/2"	1/2"	1/2"	--	COUNTER MOUNTED W/ RH BUBBLER (2)
S 2	SINK	1-1/2"	1-1/2"	1/2"	1/2"	--	COUNTER MOUNTED
S 3	SINK	1-1/2"	1-1/2"	1/2"	1/2"	--	COUNTER MOUNTED
S 4	SINK	1-1/2"	1-1/2"	1/2"	1/2"	--	COUNTER MOUNTED
S 5	SINK	1-1/2"	1-1/2"	1/2"	1/2"	--	COUNTER MOUNTED
S 6	SINK	1-1/2"	1-1/2"	1/2"	1/2"	--	COUNTER MOUNTED
S 7	SINK	1-1/2"	1-1/2"	3/4"	3/4"	--	WALL MOUNTED 2 STATION
S 8	SINK	1-1/2"	1-1/2"	3/4"	3/4"	--	COUNTER MOUNTED
SS 1	SERVICE SINK	3"	2"	3/4"	3/4"	--	FLOOR MOUNTED
DF 1	DRINKING FOUNTAIN	1-1/2"	1-1/2"	1/2"	--	--	WALL MOUNTED - BI-LEVEL WITH BOTTLE FILLER ON LOW SIDE 120/1/60
SH 1	SHOWER	--	--	1/2"	1/2"	--	(ADA)
WB 1	WASHER BOX	2"	2"	3/4"	3/4"	--	SEE DETAIL 9/P602
IMB 1	ICE MAKER BOX	--	--	1/2"	--	--	RECESSED IN WALL
HB 1	HOSE BIBB	--	--	3/4"	--	--	EXTERIOR NON-FREEZE
HB 2	HOSE BIBB	--	--	3/4"	--	--	INTERIOR WALL BOX (TOILET ROOMS)
HB 3	HOSE BIBB	--	--	3/4"	--	--	INTERIOR W/INTEGRAL VACUUM BREAKER (TOILET ROOMS)
HB 4	HOSE BIBB	--	--	3/4"	--	--	INTERIOR W/INTEGRAL VACUUM BREAKER (TOILET ROOMS)
TP 1	TRAP PRIMER	--	--	1/2"	--	--	ELECTRIC WITH TIMER 120/1/60
EW 1	EMERGENCY EYEWASH	--	--	--	--	3/4"	TEMPERED WATER FROM TV-2
HR 1	HOSE REEL	--	--	1/2"	1/2"	--	W/ RPBP - SEE DETAIL 7/P604
TV 1	TEMPERING VALVE	--	--	1/2"	1/2"	1/2"	SINGLE LAV. ASSE 1070 MOUNT UNDER LAVATORY
TV 2	TEMPERING VALVE	--	--	1/2"	1/2"	3/4"	EMERGENCY EYEWASH EW-1
FD 1	FLOOR DRAIN	2"	1-1/2"	--	--	--	W/DEEP SEAL TRAP AND ASSE TRAP GUARD
FD 2	FLOOR DRAIN	3"	2"	--	--	--	W/TRAP PRIMER CONNECTION AND ASSE TRAP GUARD - MECHANICAL PENTHOUSE
SD 1	SHOWER DRAIN	2"	1-1/2"	--	--	--	W/DEEP SEAL TRAP AND ASSE TRAP GUARD
TD 1	TRENCH DRAIN	4"	2"	--	--	--	SEE PLAN FOR LENGTH (BOILER ROOM)
F 1	FILTER	2"	--	--	--	--	SEE DETAIL 6/P601
FS 1	FLOOR SINK	2"	2"	--	--	--	12"x12" (KITCHEN) PROVIDE GRATE
FS 2	FLOOR SINK	3"	2"	--	--	--	12"x12" (KITCHEN) PROVIDE GRATE
FS 3	FLOOR SINK	4"	2"	--	--	--	12"x12" (KITCHEN) PROVIDE GRATE
HD 1	HOPPER DRAIN	4"	2"	--	--	--	
RD 1 6"	PRIMARY ROOF DRAIN	--	--	--	--	--	SEE PLAN FOR SIZES
RD 2 6"	SECONDARY ROOF DRAIN	--	--	--	--	--	SEE PLAN FOR SIZES
RD 3 6"	PRIMARY ROOF DRAIN (LOW PROFILE)	--	--	--	--	--	SEE PLAN FOR SIZES
RD 4 6"	SECONDARY ROOF DRAIN (LOW PROFILE)	--	--	--	--	--	SEE PLAN FOR SIZES
DN 1 4"	DOWNSPOUT NOZZLE	--	--	--	--	--	SEE PLAN FOR SIZES
GI 1	GREASE INTERCEPTOR	4"	3"	--	--	--	SEE DETAIL 7/P601
SM 1	SAMPLING MANHOLE	4"	--	--	--	--	SEE DETAIL 10/P601

NOTES:

(1) CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL PLUMBING FIXTURES AND DRAINS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN OR INSTALLATION.

(2)

BRANCH WATER LINE SCHEDULE

FIXTURE	FIXTURE UNITS	TOTAL QUANTITY OF FIXTURES SERVED BY A GIVEN PIPE SIZE					
		1/2"	3/4"	1"	1 1/4"	1-1/2"	2"
WATER CLOSET	10	--	--	1	2	3	8
URINAL	5	--	1	2	3	6	20
LAVATORY	2	1	3	5	7	15	50
SINK	2	1	3	5	7	15	50
KITCHEN SINK	2	1	3	5	7	15	50
SERVICE SINK	4	--	1	2	3	7	25
DRINKING FOUNTAIN	1	2	6	10	15	30	--
HOSE BIBB	3	--	1	3	5	10	33
WALL HYDRANT	3	--	1	3	5	10	33
DISHWASHER	4	--	1	2	3	7	25
TOTAL FIXTURE UNITS SERVED BY PIPE SIZE		2	6	10	15	30	100

NOTE:

MINIMUM PIPE SIZE TO ANY FIXTURE TO BE 1/2". WHERE PIPE SIZE IS SHOWN ON DRAWINGS, IT SHALL BE FOLLOWED. IN THE EVENT PIPE SIZES ARE NOT SHOWN, THE SIZE OF ANY BRANCH LINE SHALL BE DETERMINED BY USING THIS TABLE. FIND SUM OF TOTAL FIXTURE UNITS ON BRANCH LINE, THEN REDUCE TOTAL BY SUBTRACTING OFF INDIVIDUAL FIXTURE UNITS FOR EACH SUCCESSIVE FIXTURE ALONG THE BRANCH LINE.

PLUMBING EQUIPMENT SCHEDULE

WH-1 / WH-2 WATER HEATER: NATURAL GAS FIRED, HIGH EFFICIENCY TYPE, 199,000 BTUH INPUT, 261 GALLONS PER HOUR RECOVERY THRU 90° F TEMP. RISE. 3" DIA. FACTORY VENT & INTAKE KIT. HEATER SHALL BE COMPLETE WITH 100 GALLON, FACTORY INSULATED HOT WATER STORAGE TANK WITH ASME RATED GLASS LINED TANK. HEATER SHALL BE SUITABLE FOR PVC VENTING, COMPLETE WITH P & T RELIEF VALVE, GAS TRAIN, FACTORY WIRED AND TESTED. UPPER & LOWER LIMIT OPERATING THERMOSTATS, COMBINATION HIGH AND LOW PRESSURE SAFETY CONTROLS, ROOF VENT & INTAKE TERMINATION KIT, LOW WATER CUT-OFF, & ALL CONTROLS FOR AUTOMATIC OPERATION. SET AT 120° F
MANUFACTURER: BRADFORD WHITE
MODEL: EF-100T-199E-3NA
POWER: 120/1/60/15 AMP.
WEIGHT: 900 POUNDS
DIMENSIONS: 77-5/8"HT x 28-1/4" DIA.

WH-3 WATER HEATER: GAS FIRED, HIGH EFFICIENCY TYPE, 199,000 BTUH INPUT, 597 GALLONS PER HOUR RECOVERY THRU 40°F TEMP. RISE. 3" DIA. FACTORY VENT & INTAKE KIT. HEATER SHALL BE COMPLETE WITH 100 GALLON, FACTORY INSULATED HOT WATER STORAGE TANK WITH ASME RATED GLASS LINED TANK. HEATER SHALL BE SUITABLE FOR PVC VENTING, COMPLETE WITH P & T RELIEF VALVE, GAS TRAIN, FACTORY WIRED AND TESTED. UPPER & LOWER LIMIT OPERATING THERMOSTATS, COMBINATION HIGH AND LOW PRESSURE SAFETY CONTROLS, ROOF VENT & INTAKE TERMINATION KIT, LOW WATER CUT-OFF, & ALL CONTROLS FOR AUTOMATIC OPERATION. SET AT 140°F.
MANUFACTURER: BRADFORD WHITE
MODEL: EF-100T-199E-3NA
POWER: 120/1/60/15 AMP.
WEIGHT: 900 LBS.
DIMENSIONS: 77-5/8" HT. x 28-1/4" DIA.

WS-2 WATER SOFTENER: SIMPLEX UNIT , 47 GPM CONTINUOUS FLOW RATE @ 15 PSI PRESSURE DROP THRU EACH SOFTENER TANK. 120,000 GRAIN TANK EXCHANGE CAPACITY. 4 CUBIC FEET OF HIGH CAPACITY RESIN FOR SOFTENER TANK. SOFTENER TANK SHALL BE 16" DIA. X 65" HIGH, WITH 24" DIA. X 41" HIGH BRINE TANK. THE WATER SOFTENER ASSEMBLY SHALL BE FURNISHED COMPLETE WITH ALL CONTROLS AND FITTINGS FOR FULLY AUTOMATIC OPERATION. 2" INLET AND OUTLET PIPE REQUIRED.
MANUFACTURER: PACIFIC WATER INC.
MODEL: WS120-956SM

BT-1 BRINE TANK: SEE SPECIFICATIONS

CP-1 (2-REQ'D) PUMP: IN-LINE RECIRCULATING, 120 DEG. F. WATER, 12 GPM AT 20 FT. HEAD,1/2 H.P., 120/1/60, 1750 RPM, 1 1/4" CONNECTIONS. ALL BRONZE CONSTRUCTION.
MANUFACTURER: BELL & GOSSETT
MODEL: SERIES 60 - 1-1/4 X 5-1/4

CP-2 (2-REQ'D) PUMP: IN-LINE RECIRCULATING, 140 DEG. F. WATER, 5 GPM AT 17 FT. HEAD, 1/6 H.P., 120/1/60, 1750 RPM, 3/4" CONNECTIONS. ALL BRONZE CONSTRUCTION.
MANUFACTURER: BELL & GOSSETT
MODEL: SERIES PR

EX-1 EXPANSION TANK: BLADDER TYPE, DOMESTIC 120° HOT WATER, 77.0 GAL. TOTAL VOLUME, 36.0 GALLONS ACCEPTANCE VOLUME. FACTORY AIR CHARGE 55 PSI, 24" DIA. x 46-1/4" HIGH. COMPLETE WITH STEEL SHELL AND HEAVY DUTY BUTYL DIAPHRAGM.
MANUFACTURER: AMTROL
MODEL: AST-180

EX-2 EXPANSION TANK: BLADDER TYPE, DOMESTIC 140° HOT WATER, 12.5 GAL. TOTAL VOLUME, 10.0 GALLONS ACCEPTANCE VOLUME. FACTORY AIR CHARGE 55 PSI, 16-1/4" DIA. x 17-1/4" HIGH. COMPLETE WITH STEEL SHELL AND HEAVY DUTY BUTYL DIAPHRAGM.
MANUFACTURER: AMTROL
MODEL: AST-30

PLUMBING PIPING LEGEND

DESCRIPTION	SYMBOL
WASTE (BELOW GRADE)	
VENT	
COLD WATER	
HOT WATER (120 DEG.F.)	
HOT WATER RECIRCULATING (120 DEG.F.)	
TEMPERED WATER	T
HOT WATER SUPPLY (140° DEG F)	140
HOT WATER RECIRCULATING 140° DEG F)	140
GAS 4 OUNCE)	G 4oz
GAS (2LB)	G 2#
ROOF DRAIN (ABOVE GRADE)	RD
ROOF DRAIN (BELOW GRADE)	RD
SECONDARY ROOF DRAIN	SRD
SOFT WATER	S
DRAIN	D

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SALT LAKE CITY, UT 84102
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VCBO.COM

VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

LICENSED PROFESSIONAL ENGINEER #334524-2202 JAMES AUSTIN BERRETT 11/6/2023 UTAH

OLSEN & PETERSON CONSULTING ENGINEERS, INC.
10 East 2700 South, Salt Lake City, UT 84115
Phone: (801) 486-8446 Fax: (801) 487-0300

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

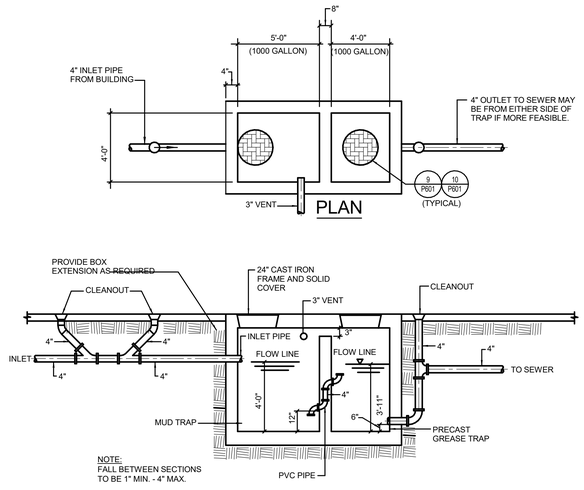
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING SCHEDULES

P501

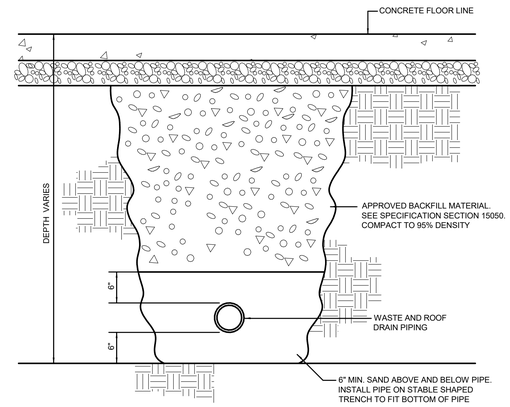
11/16/2023 8:24:42 AM



1,000 GALLON GREASE INTERCEPTOR DETAIL

NOT TO SCALE

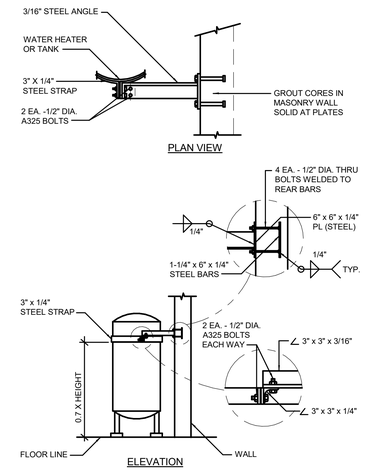
7 / P601



TYPICAL WASTE & ROOF DRAIN TRENCH DETAIL

NOT TO SCALE

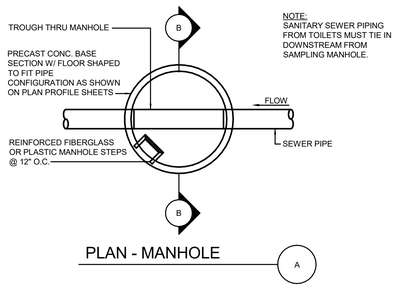
4 / P601



VERTICAL TANK SEISMIC RESTRAINT

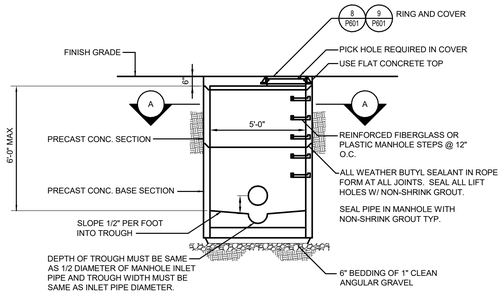
NOT TO SCALE

1 / P601



NOTES:

1. PIPING, CLEANOUT CONFIGURATION, SIZE AND TYPE OF PIPING MATERIAL AS PER CITY OR SANITARY DISTRICT. INSPECTION BY LOCAL SEWER DEPARTMENT PRIOR TO BACKFILLING IS REQUIRED.
2. WIDTH OF TROUGH IN THE MANHOLE MUST BE THE SAME SIZE AS THE INLET PIPE INTO MANHOLE. DEPTH OF TROUGH MUST BE THE SAME SIZE AS 1/2 OF INLET PIPE DIAMETER.
3. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
4. REINFORCEMENT STEEL SHALL BE ASTW A615 GRADE 60.
5. THE CONCRETE COVER OVER REINFORCEMENT STEEL SHALL BE A MINIMUM OF 1-1/2 INCHES.
6. THE STRUCTURE SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF UTAH.
7. THE STRUCTURE SHALL BE DESIGNED FOR THE FOLLOWING LOADING CRITERIA:
   A) WALLS DESIGNED FOR A SATURATED EQUIVALENT FLUID AT-REST SOIL PRESSURE OF 90 PCF PLUS TRUCK SURCHARGES.
   B) TRUCK LOADING USING AN AASHTO H-20 TRUCK LOAD.
8. MANHOLES OVER 4 FEET IN DEPTH WILL HAVE STAINLESS OR PLASTIC STEPS.
9. ALL MANHOLES MUST HAVE ROUND NOTCHED COVERS WITH PICK HOLE FOR REMOVAL.
10. FOR NEW CONSTRUCTION, BOTTOM OF INLET PIPE INTO MANHOLE MUST BE AT LEAST 3 INCHES ABOVE BOTTOM OF THE TROUGH THRU MANHOLE.

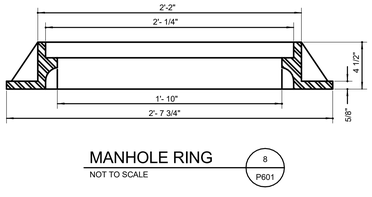


SAMPLING MANHOLE DETAIL

NOT TO SCALE

10 / P601

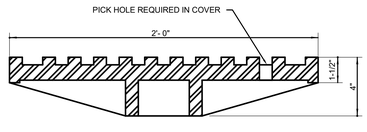
NOTE: IF CONCRETE GRADE RINGS ARE USED ON A SAMPLING MANHOLE INSTALLATION, THE TOTAL HEIGHT OF THE STACKED RINGS MUST NOT EXCEED 12".



MANHOLE RING

NOT TO SCALE

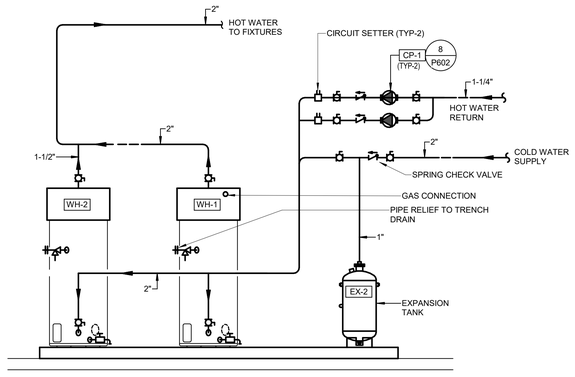
8 / P601



MANHOLE COVER

NOT TO SCALE

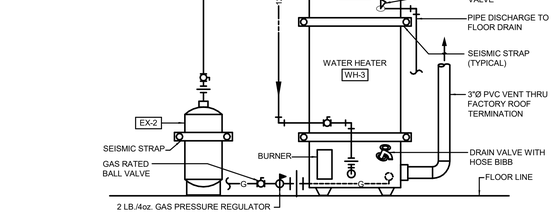
9 / P601



HOT WATER PIPING SCHEMATIC

SCALE: NTS

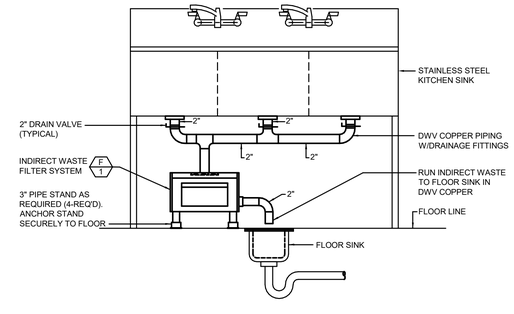
5 / P601



140 DEG. F. GAS FIRED WATER HEATER DETAIL

NOT TO SCALE

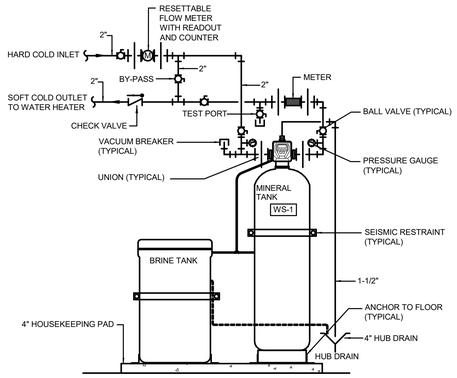
2 / P601



UNDER SINK FILTER SYSTEM DETAIL

NOT TO SCALE

6 / P601



WATER SOFTENER WS-1 PIPING DETAIL

NOT TO SCALE

3 / P601

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

LICENSED PROFESSIONAL ENGINEER
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AUSTIN
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STATE OF UTAH

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10 East 2700 South, Salt Lake City, UT 84115
Phone: (801) 486-8446 Fax: (801) 487-0301

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

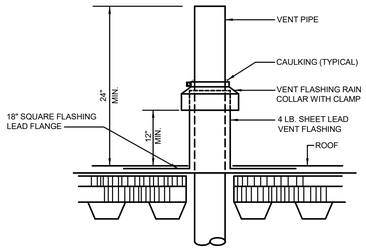
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING DETAILS

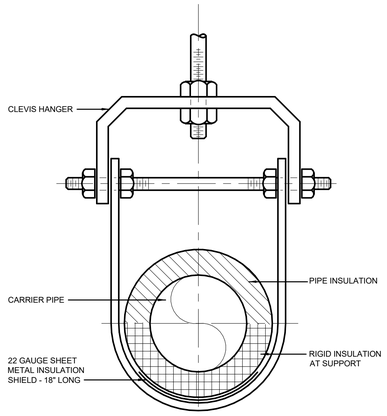
P601

11/6/2023 3:01:08 PM



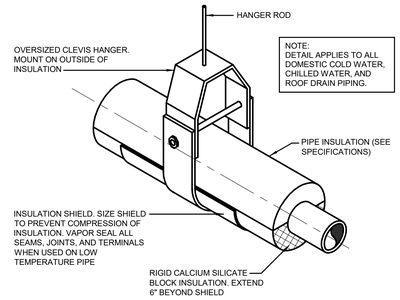
VENT THRU ROOF DETAIL — 7 / P602

NOT TO SCALE



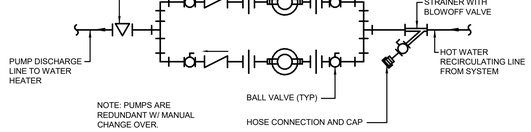
PIPE HANGER DETAIL — 4 / P602

NOT TO SCALE (HOT SURFACE PIPING)



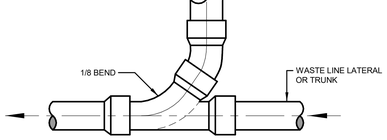
PIPE SUPPORT DETAIL — 1 / P602

NOT TO SCALE



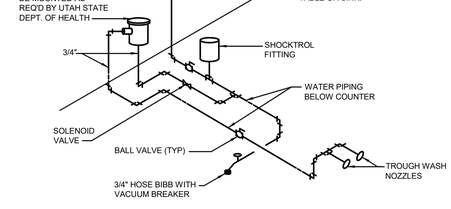
CIRCULATING PUMP DETAIL — 8 / P602

NOT TO SCALE



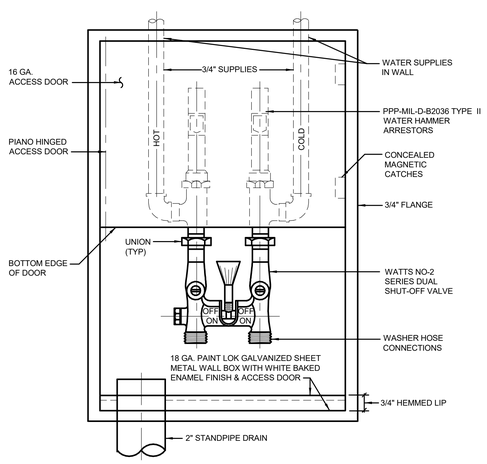
FLOOR CLEANOUT DETAIL — 5 / P602

NOT TO SCALE



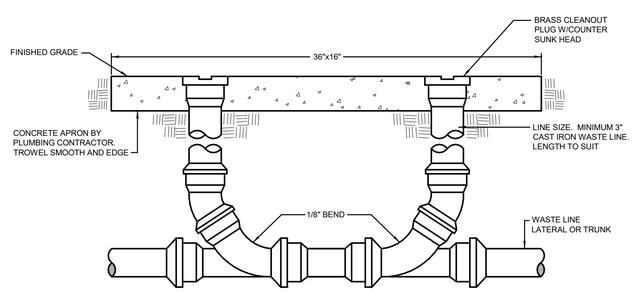
DISHWASH AREA PIPING SCHEMATIC — 2 / P602

NOT TO SCALE



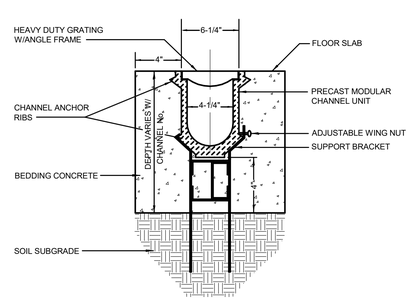
WASHER ROUGH-IN DETAIL — 9 / P602

NOT TO SCALE



DOUBLE CLEANOUT TO GRADE DETAIL — 6 / P602

NOT TO SCALE (TYPICAL ALL COTG)



PRECAST TRENCH DRAIN DETAIL — 3 / P602

NOT TO SCALE

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VCBO NUMBER: 22785
CLIENT NUMBER: -
DATE: NOVEMBER 08 2023

LICENSED PROFESSIONAL ENGINEER #334524-2202 JAMES AUSTIN BERRETT 11/8/2023 UTAH

OLSEN & PETERSON CONSULTING ENGINEERS, INC.
10 East 2700 South, Salt Lake City, UT 84115
Phone: (801) 486-8446 Fax: (801) 487-0301

OGDEN SCHOOL DISTRICT

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING DETAILS

P602

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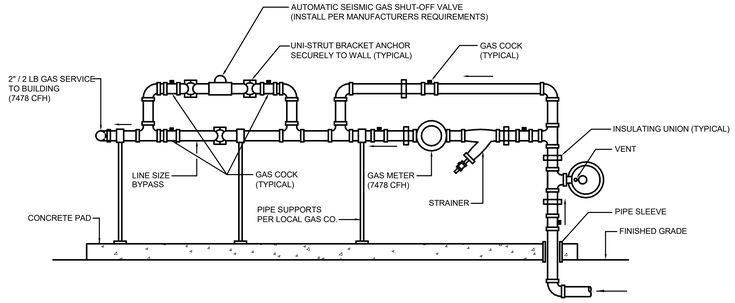
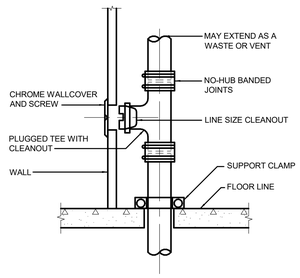


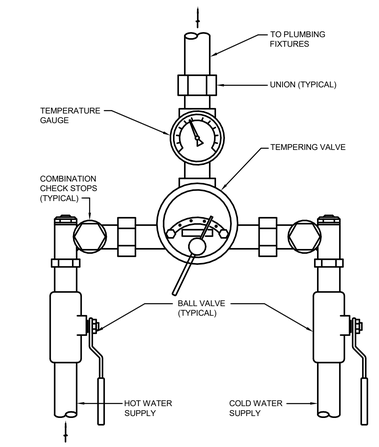
GAS METER SERVICE CONNECTION DETAIL

NOT TO SCALE — 8 / P603



WALL CLEANOUT DETAIL

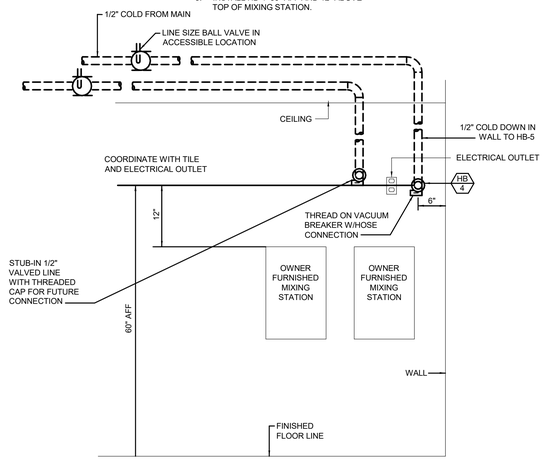
NOT TO SCALE — 4 / P603



TEMPERING VALVE DETAIL

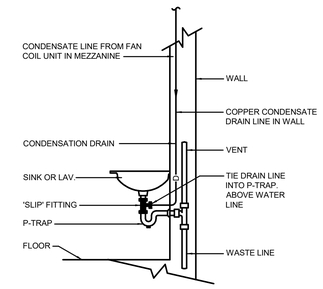
NOT TO SCALE (TYPICAL FOR TV-2) — 1 / P603

NOTES:
1. INSTALL HB-4 ON WALL OPPOSITE SS-1 FAUCET ADJACENT TO ELECTRICAL OUTLET.
2. INSTALL HB-4 6" OFF WALL.
3. INSTALL HB-4 60" AFF AND 12" ABOVE TOP OF MIXING STATION.



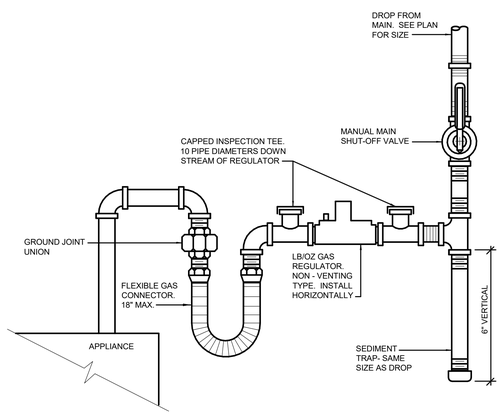
HOSE BIBB AT SS-1 DETAIL

NOT TO SCALE — 9 / P603



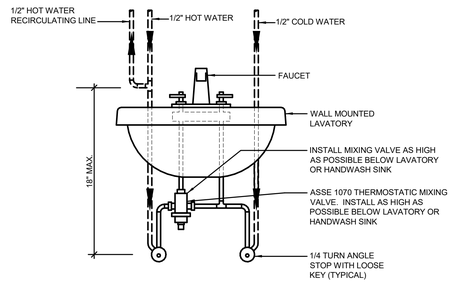
CONDENSATE DRAIN DETAIL

NOT TO SCALE — 5 / P603



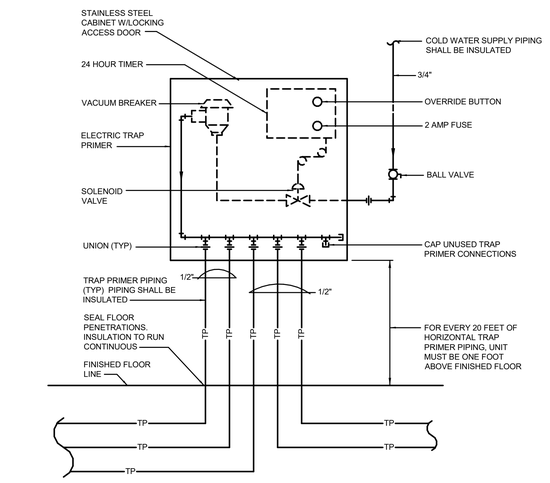
GAS LINE CONNECTION DETAIL

NOT TO SCALE — 2 / P603



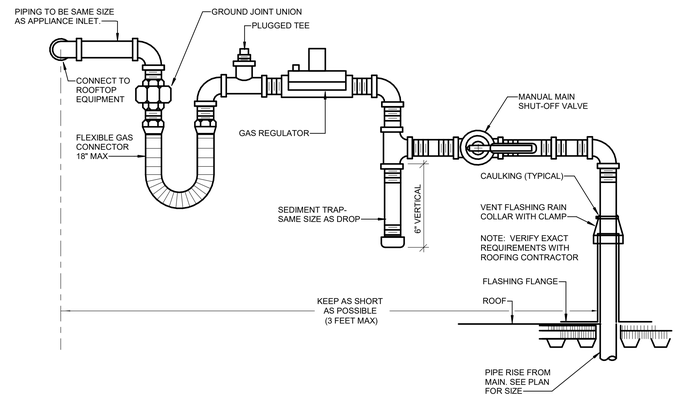
PUBLIC LAVATORY L-1 & KITCHEN HANDWASH SINK PIPING DETAIL

NOT TO SCALE — 6 / P603



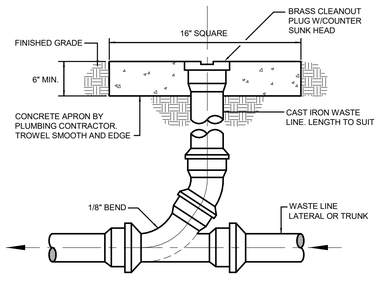
ELECTRIC TRAP PRIMER DETAIL

NOT TO SCALE — 3 / P603



ROOFTOP GAS LINE CONNECTION DETAIL

SCALE: NTS — 11 / P603



SINGLE CLEANOUT TO GRADE DETAIL

NOT TO SCALE — 7 / P603

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BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING DETAILS

P603

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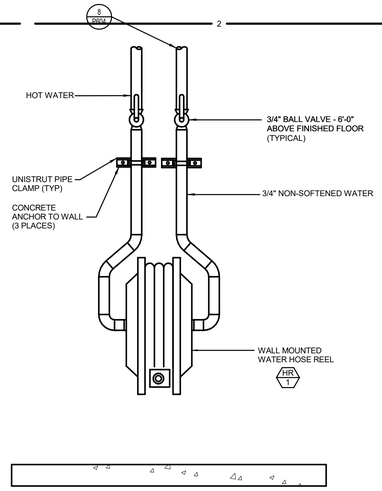
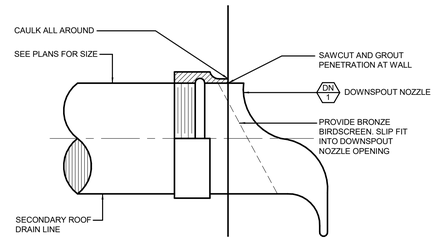


HOSE REEL STATION DETAIL

NOT TO SCALE

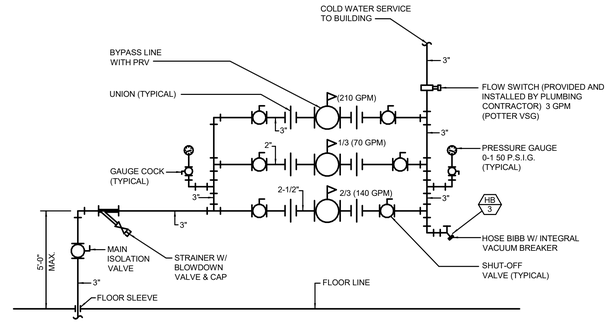
7 P604



DOWNSPOUT NOZZLE DETAIL

NOT TO SCALE

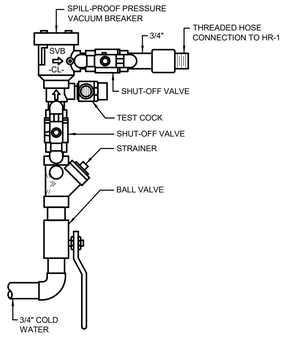
4 P604



PRESSURE REDUCING STATION DETAIL

NOT TO SCALE

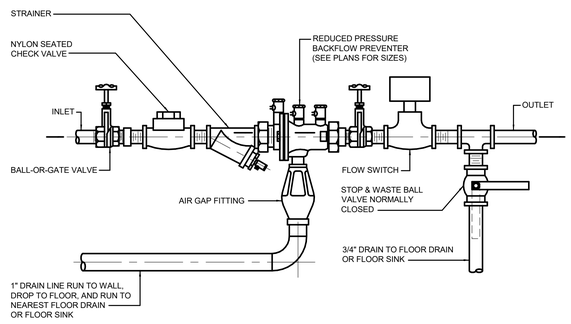
1 P604



SPILL-PROOF VACUUM BREAKER AT HR-1 CONNECTION DETAIL

NOT TO SCALE

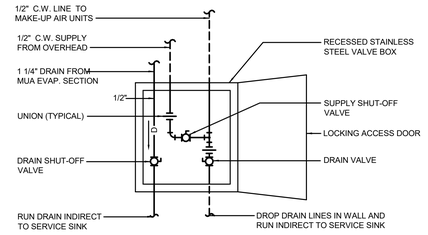
8 P604



REDUCED PRESSURE BACKFLOW PREVENTER DETAIL

NOT TO SCALE CCT-1 & AHU EVAPORATIVE COOLER

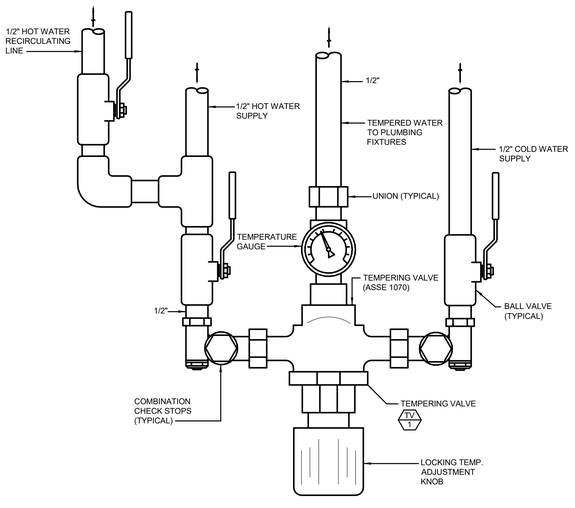
5 P604



MUA-1WATER SUPPLY & DRAIN DETAIL

NOT TO SCALE

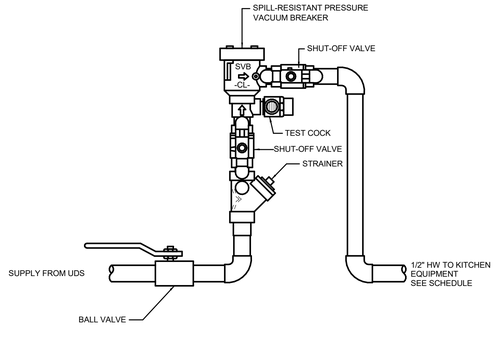
2 P604



TEMPERING VALVE DETAIL

NOT TO SCALE

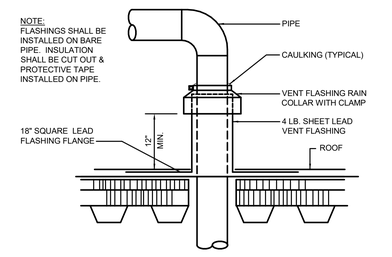
9 P604



SPILL-RESISTANT VACUUM BREAKER AT KITCHEN EQUIPMENT

NOT TO SCALE

6 P604



PIPE THRU ROOF PENETRATION DETAIL

NOT TO SCALE

3 P604

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BID PACKAGE 5 - GENERAL CONSTRUCTION

PLUMBING DETAILS

P604

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GENERAL STRUCTURAL NOTES

GENERAL

1. The structural notes are intended to complement the project specifications. Specific notes and details in the drawings shall govern over the structural notes and typical details.
2. Typical details and sections shall apply where specific details are not shown.
3. The structural drawings are not all-inclusive and do not contain all dimensions, elevations, openings, mechanical shafts, and penetrations needed to build the structure. The contractor shall coordinate these items with the Architectural, Mechanical and Electrical drawings.
4. The contractor shall verify all site conditions and dimensions. If actual conditions differ from those shown in the contract drawings, the contractor shall immediately notify the architect/engineer before proceeding with the fabrication or construction of any affected elements.
5. Omissions or conflicts between the contract drawings and/or specifications shall be brought to the attention of the architect/engineer before proceeding with any work involved. In case of conflict, follow the most stringent requirement as directed by the architect/engineer at no additional cost to the owner.
6. The contractor shall submit a written request to the architect/engineer before proceeding with any changes, substitutions, or modifications. Any work done by the contractor before receiving written approval will be at the contractor's risk.
7. The contractor shall coordinate with all trades any items that are to be integrated into the structural system such as openings, penetrations, mechanical and electrical equipment, etc. Sizes and locations of mechanical and other equipment that differs from those shown on the contract drawings shall be reported to the architect/engineer.
8. The contractor shall provide adequate shoring and bracing as required for the chosen method of erection. Shoring and bracing shall remain in place until final connections for the permanent members are completed. The building shall not be considered stable until all connections are completed. Walls shall not be considered self-supporting and shall be braced until the floor/roof system is completed.
9. The contractor shall not cut or core any holes in masonry or concrete walls without prior review by the architect/engineer.
10. Site observations by BHB Consulting Engineers' field representative shall not be construed as approval of construction procedures nor special inspection.
11. Detailing and shop drawing production for structural elements will require information (including dimensions) contained in the architectural, structural and/or other consultants' drawings. The structural drawings shall be used in conjunction with the architectural and other consultant's drawings. Some dimensions and elements such as elevations, depressions, slopes, mechanical housekeeping pads, etc. are not shown in the structural drawings. All dimensions shown on structural drawings shall be verified by contractor with architectural, mechanical, and electrical drawings.
12. Contractor shall review shop drawings for compliance with contract documents, and stamp shop drawings with review stamp prior to submission to architect for review. Review of shop drawings by BHB Consulting Engineers is for general compliance only and is not intended for approval. The shop drawing review shall not relieve the contractor from the responsibility of completing the project according to the contract documents. Fabrication shall not begin until shop drawings review process is complete. Shop drawings made from reproductions of the contract drawings will be rejected unless the contractor signs a release agreement prior to the shop drawings being reviewed.
13. Only an authorized representative of BHB Consulting Engineers may make changes to these contract drawings. BHB Consulting Engineers shall not be held responsible or liable for any claims arising directly or indirectly from changes made without written authorization by an authorized representative of BHB Consulting Engineers.
14. Bidding, pricing or construction done prior to receiving final building permits from the authorities having jurisdiction is at the contractor's own risk. Changes to the drawings may be required as part of the plan check process. BHB Consulting Engineers will not be held liable for, nor compensate for, changes to these drawings before final jurisdiction approval is obtained.

BASIS OF DESIGN

1. Governing Code — International Building Code 2018
   a. Risk Category — III
2. Snow Loads
   a. Ground Snow Load — P_g = 38 psf
   b. Snow Importance Factor — I_s = 1.1
   c. Snow Exposure Coefficient — C_e = 1.0
   d. Thermal Exposure Coefficient — C_t = 1.0
   e. Roof Snow Load — $P_f = 0.7 * C_e * C_t * I_s * P_g$ = 29 psf plus Snow Drift
3. Rain Loads
   a. Rain Intensity — i = 1.5 in/hr
4. Roof Live Load — 20 psf
5. Floor Live Loads
   a. Classroom — 60 psf + 20 psf Partition
   b. Exit Facilities & Corridors — 100 psf
   c. Mechanical Rooms — 125 psf
6. Other Loads
   a. Photovoltaic Array — 7 psf (All roof areas except above multipurpose room)h
7. Seismic Loads
   a. Seismic Importance Factor, I_e — 1.25
   b. Seismic Design Category — D
   c. Site Specific Ground Motion Hazard Analysis — Not Required per exceptions in section 11.4.8 of ASCE 7
   d. Mapped Spectral Acceleration — S_s = 1.395g; S_1 = 0.516g
   e. Soil Site Class — D (with data)
   f. Soil Site Coefficients — F_a = 1.0; F_v = 1.8
   g. 5% Damped Design Spectral Response Acceleration — $S_{DS} = 2/3 * F_a * S_S$ = 0.930g; $S_{D1} = 2/3 * F_v * S_1$ = 0.619g
   h. Seismic-Force-Resisting System — Special Masonry Shear Walls
   i. Response Modification Coefficient — R = 5.0
   j. System Over-strength Factor — Ω_0 = 2.5
   k. Deflection Amplification Factor — C_d = 3.5
   l. Redundancy Factors — ρ_x = 1.0; ρ_y = 1.0
   m. Fundamental Building Period — T = 0.294 seconds
   n. Seismic Response Coefficient — $Cs = S_{DS} * I_e / R$; $Cs = S_{D1} * I_e / (R*T)$ (3)
   o. W — Dead Loads of Structure
   p. Base Shear — $Vx = C_s * W = 0.233 * W$; $Vy = C_s * W = 0.233 * W$
   q. Analysis Procedure — Equivalent Lateral Force (Static)
8. Wind Loads
   a. Basic Wind Velocity (3 Second Gust) — 109 mph
   b. Exposure Type — C
   c. Internal Pressure Coefficient, GCpi — +/-0.18
   d. Topographic Factor, Kzt — 1.00
   e. Ground Elevation Factor, Ke — 0.85
   f. Components and Cladding Wind Force Table (psf, Strength Design)

Location		Tributary Area (square feet) 10	20	50	100	500
Walls	Zone 5: Within 12 feet of building corners	31.1	29.0	26.3	24.2	19.4
	Zone 4: All other areas	25.3	24.2	22.9	21.8	19.4
Roof	Zone 2: Within 12 feet of building corners	38.4	37.8	36.9	36.3	36.3
	Zone 3: Within 12 feet of building edges	60.0	53.5	44.9	38.4	38.4
	Zone 1: All other areas	27.6	27.6	27.6	27.6	27.6

FOUNDATION

1. Soils Report
   a. Author: — CMT Technical Services
   b. Dated: — April 19, 2023
   c. Project No: — 19898
2. Soil Bearing Pressure — 2,500 psf, see Earthwork Section.
3. Frost Protection — 30" minimum to bottom of footing. Contractor shall field verify that the footing elevations and final grades indicated on the plans will provide the minimum frost protection. The contractor shall notify the architect/engineer if there are any locations where the minimum frost protection might not be achieved prior to placing concrete.
4. Lateral Soil Pressure Fluid Equivalent Density:
   a. Active — 36 pcf (retaining walls) [36 psf seismic]
   b. At Rest — 54 pcf (rigid foundation walls)
   c. Passive — 300 pcf [165 psf seismic]
5. Coefficient of Friction — 0.3

EARTHWORK

1. All footings (unless noted otherwise) shall bear on 12" (minimum) of compacted structural fill extending down to suitable natural material. See "Engineered Structural Fill Detail" in drawings. (1)
2. Consult the project specifications and soils report for further earthwork requirements.

STRUCTURAL FOAM

1. Submittals
   a. Submit EPS structural foam manufacturer's product literature and Technical Data, including:
      i. Physical properties in compliance with ASTM D6817 Type specified.
      ii. 10-year physical property warranty.
2. Structural Foam
   a. All EPS structural foam shall be in compliance with ASTM D6817, EPS12, 0.7 lb/cu.ft.
   b. All EPS structural foam blocks shall be treated by the manufacturer with a tested and proven termite treatment for below grade applications, 3-year minimum field exposure. The treatment shall be EPA registered, meet requirements of ICC ES AC239, and be recognized in an ICC ES report.
3. Structural Foam Fill
   a. Install structural foam block in layer with abutting edges and ends and with the long dimension of each block at right angles to blocks in each subsequent layer. Offset joints of blocks in successive layers.
   b. Install structural foam connectors at each layer of foam to resist horizontal displacement according to foam manufacturer's written instructions.
   c. GeoGripper® plates or approved equal shall be used to restrain EPS structural foam from moving laterally in layer over layer applications. The GeoGripper® plate (or approved equal) shall be manufactured by AFM Corporation. The plate shall be made of galvanized or stainless steel with two-sided multi-barbed design capable of piercing foam. Each plate shall be capable of a lateral holding strength of 60 lbs. ((2) plates per 4'x8' section of EPS minimum).

CONCRETE

1. Materials, unless noted otherwise:
   a. Normal weight aggregates — ASTM C 33
      i. Combined aggregate gradation for slabs on grade and other designated concrete shall be 8% - 18% for large top size aggregates (1.1/2") or 8% - 22% for smaller top size aggregates (1" or 3/4") retained on each sieve below the top size and above the No. 100. The range for the No. 30 and No.50 sieves shall be 8% - 15% retained in each. To avoid gap gradation the following shall occur:
         1. The percent retained on two adjacent sieves shall not fall below 5%.
         2. The percent retained on three adjacent sieves shall not fall below 8%.
         3. When the percent retained on two adjacent sieves is less than 8%, the total retained on either of these sieves and the adjacent outside sieve shall be at least 13%. See ACI 302 Section 5.4.3.3 for more information.
      ii. A gradation chart or table shall be submitted with mix designs for slabs on grade with exposed polish finish.
      iii. Maximum Aggregate Size shall not be larger than:
         1. 3.1/2" or 1/5 the narrowest dimension of the forms
         2. 1/3 the depth of the slab
         3. 3/4 the minimum clear spacing between bars
   b. Lightweight aggregates — ASTM C 330
   c. Lightweight concrete shall not exceed 110 pounds per cubic foot and shall be made of lightweight coarse aggregates and a blend of lightweight and normal weight fines.
   d. Reinforcing Steel — ASTM 615 Grade 60 (Fy = 60 ksi) Use Grade 40 (Fy = 40 ksi) for field bent dowels with spacings indicated reduced by 1/3.
   e. Deformed Bar Anchors (DBA) — ASTM A496
   f. Headed Stud Anchors (HSA) — ASTM A108
   g. Anchor Rods — See Structural Steel section
   h. Admixtures:
      i. Air-entraining admixtures shall comply with ASTM C 260 (when used).
      ii. Calcium chloride shall not be added to the concrete mix.
      iii. Water-reducing admixture shall comply with ASTM C 494/C 494M, Type A (when used)
      iv. Retarding admixture shall comply with ASTM C 494/C 494M, Type B (when used).
      v. Water-reducing and retarding admixture shall comply with ASTM C 494/C 494M, Type D (when used).
      vi. High-range, water-reducing admixture shall comply with ASTM C 494/C 494M, Type F (when used).
      vii. High-range, water-reducing and retarding admixture shall comply with ASTM C 494/C 494M Type G (when used).
      viii. Admixture manufacturer shall have ISO 9001 Quality Certification. To ensure compatibility all admixtures shall be from the same manufacturer.
   i. Type I/II cement complying with ASTM C-150 shall be used for all concrete. Cement source shall remain the same for the entire job.
   j. The water/cementitious materials ratios shall meet the requirements of Table 19.3.2.1 of ACI 318-14.
   k. Cementitious Materials – Limit percentage, by weight, of cementitious materials other than portland cement as follows:
      i. Fly Ash - ASTM C618, Class F – 35% maximum cementitious content.
      ii. Slag Cement – ASTM C989, Grade 100 or 120 – 50% maximum cementitious content.
   l. Provide air entraining as recommended by Table 19.3.3.1 of ACI 318-14. Concrete that extends above grade and is exposed to freezing and thawing while moist shall be air entrained. Concrete in unconditioned spaces shall be considered site concrete.
   m. No aluminum conduit or product containing aluminum or any other material injurious to concrete shall be embedded in concrete.
2. Compressive strengths of concrete at 28 days shall meet the follow performance requirements (see ACI-318-14; Chapter 19):
   a. Footings & Interior Foundation Walls — Strength 3,000 psi; Classification F0, S0, W0, C0
   b. Exterior Foundation Walls — Strength 3,500 psi; Classification F1, S0, W0, C0
   c. Interior Slabs on Grade — Strength 3,000 psi; Classification F0, S0, W0, C0 (Exposed polished concrete slabs on grade shall have a maximum w/cm ratio of 0.4)
   d. Light Weight Concrete over Steel Deck — Strength 3,000 psi; Classification F0, S0, W0, C0
   e. All Site Concrete with Reinforcement — Strength 5,000 psi; Classification F3, S0, W1, C2
   f. All Site Concrete without Reinforcement — Strength 4,500 psi; Classification F3, S0, W1, C2
3. Reinforcement for concrete slabs on grade:
   a. Typical 4" thick concrete slab on grade.
      i. Reinforce slab with #3 bars at 24" o.c. each way with 1.1/2" max cover below the top surface of the concrete.
   b. 8" thick concrete slab on grade (Bldg E, Area A, Level 1)
      i. Reinforce slab with #4 bars at 16" o.c. each way, top and bottom, with 1.1/2" max cover at top mat and 2" cover at bottom mat.
   c. Exposed polished 4" thick concrete slab on grade.
      i. Reinforce slab with #3 bars at 18" o.c. each way with 1.1/2" max cover below the top surface of the concrete.
      ii. Provide fiber reinforcing as follows:
         1. 3 lbs minimum per cubic yard of macro-synthetic fiber reinforcing (ASTM C 1116 Type 3) with the following requirements:
         2. Length 1.1/2" – 2"
         3. Equivalent diameter of 0.016" to 0.05"
         4. Minimum aspect ratio (length to equivalent diameter) of 50 to 90.
         5. Provide a fiber dosage to achieve a minimum post-crack residual strength (f_{e3}) of 200 psi when tested according to ASTM C1609.
         6. Maximum concrete shrinkage shall be 0.04% when tested according to ASTM C157 or C157 modified.
         7. Fiber manufacturer shall provide the following:
            a. Fiber dosage
            b. Mix design
            c. Finishing practices
4. Reinforcement for concrete over metal floor decks : (4)
   a. 3.1/4" thick (6.1/4" overall) light weight concrete slab shall be poured over the steel deck. Reinforce slab with a macro-synthetic fiber reinforcing (ASTM C 1116 Type III) with an equivalent diameter of 0.016" to 0.05", and a minimum aspect ratio (length to equivalent diameter) of 50. Provide 3 lbs minimum per cubic yard. Fiber manufacturer shall provide 2-hour fire resistance certification from UL.
      i. At contractor's option, the welded wire fabric may be used in lieu of fiber reinforcing with the following requirements:
         1. 6" x 6" – W2.1/W2.1 welded wire fabric minimum, unless noted otherwise. Welded Wire Fabric shall be placed 1" to 1.1/2" below the top of the slab.
      ii. Where noted, provide 6" x 6" – W5.0 x W5.0 welded wire fabric in addition to macro-fiber. Welded Wire Fabric shall be placed 1" to 1.1/2" below the top of the slab. Alternative of #4 at 24" o.c. e.w.
5. Only one grade or type of concrete shall be poured on the site at any given time.
6. The contractor shall be responsible for the design, detailing, care, placement and removal of all formwork and shores.
   a. Supporting forms and shoring shall not be removed until structural members have acquired sufficient strength to safely support their own weight and any construction load to which they may be subjected. In no case, however, shall forms and shoring be removed in less than 24 hours after concrete placement.
7. Reinforcement shall have the following concrete cover:

a. Cast-in-place Concrete	Clear Cover
i. Cast against and permanently exposed to earth	3"
ii. Formed concrete exposed to earth or weather:	
#6 thru #18 bars	2"
#5 and smaller bars	1.1/2"
iii. Concrete not exposed to weather or in contact with ground:	
Slabs, Walls and their piers, Joists; #11 bars and smaller	3/4"
Beams, Columns: Primary Reinf., Ties, Stirrups, Spirals	1.1/2"

8. Detailing:
   a. Lap splice lengths shall be detailed to comply with the "Concrete Reinforcing Bar Lap Splice Schedule" in drawings. Splices may be made with mechanical splices capable of 125% tension capacity of the bar being spliced. Mechanical splices shall be the positive connecting type coupler and shall meet all International Building Code requirements and shall have a current ICC-ES report or IAPMO Certification. Use "Lenton" Standard Couplers (ICC ER-3967), "Bar-Lock" (ICC ESR-2495) or equal with internal protector. If mechanical splices are used, splices or couplers on adjacent bars shall be staggered a minimum of 24" apart along the longitudinal axis of the reinforcing bars.
   b. At joints, provide reinforcing dowels to match the member reinforcing, unless noted otherwise.
   c. At all discontinuous control or construction slab on grade joints, provide 2 - #4 x 48".
   d. Corner Bars: Provide corner bars at intersecting wall corners using the same bar size and spacing as the horizontal wall reinforcing. Corner bars shall lap the horizontal reinforcing with the required lap splice length. See "Typical Corner Wall Reinforcing at Concrete Walls" detail in drawings.
   e. All vertical reinforcing shall be doweled to footings, or to the structure below with the same size and spacing as the vertical reinforcing for the element above. Dowels extending into footings shall terminate with a 90-degree standard hook and shall extend to within 4" of the bottom of the footing. Footing dowels (#8 bars and smaller) with hooks need not extend more than 20" into footings.
   f. Horizontal wall reinforcing shall be continuous through construction and control joints.
   g. See "Typical Reinforcing for Miscellaneous Openings Less than 3'-0" in Concrete Walls" detail in drawings for reinforcing around miscellaneous openings (8" to 36" wide). For openings wider than 36", contact the engineer. All recesses that interrupt reinforcing shall be reinforced the same as an opening.
9. Construction Joints, Control (Contraction) Joints:
   a. Construction joints in all horizontal and vertical construction joints including between top of footing and foundation walls shall be intentionally roughened to a full amplitude of approximately 1/4". The laitance on the concrete (thin, flaky layer of hardened, weakened hydrated cement) shall be mechanically removed from the surface after the concrete has achieved final set. Construction joints in slabs on grade shall not exceed a distance of 125'-0" o.c. in any direction.
   b. Control joints shall be installed in slabs on grade so the length to width ratio of the slab is no more than 1.25:1. Control joints shall be completed as soon as final set is achieved and it is okay to operate the cutter on the slab. Final set is typically achieved within the first 4 to 12 hours after the slab has been finished in an area (depending on weather conditions and concrete hydration rate; 4 hours in hot weather to 12 hours in cold weather). For early entry saw cutting, joints should be cut within the first 1 to 4 hours (depending on weather conditions and concrete hydration rate; 1 hour for hot weather and 4 hours for cold weather). Where saw cut joints cannot be cut along the entire projected length of the joint, a 90-degree hand grinder or other tool shall be used to complete the joint. Control joints may be installed by:
      i. Saw cut a depth of 1/4 the thickness of the slab (1.1/4" ± for early entry saws) minimum.
      ii. Tooled joints a depth of 1/4 the thickness of the slab
      iii. Saw cut depth shall be increased to 1/3 of the slab thickness (1.3/4" ± for early entry saws) where macro fibers are used.
   c. For interior concrete slabs-on-grade that are to receive **no** floor covering, install construction or control joints in slabs on grade at a spacing not to exceed 24 times the slab thickness in any direction, unless noted otherwise. For interior concrete slabs-on-grade that are to receive floor coverings the contractor has the option to increase the control joint spacing to 36 times the slab thickness in any direction.
10. Construction
    a. Use chairs or other support devices recommended by the CRSI to support and tie reinforcement bars prior to placing concrete. Reinforcing steel for slabs on grade and slabs over metal deck shall be adequately supported. Support reinforcing steel of slabs on grade with precast concrete units. Lifting the reinforcing off the grade or deck during placement of concrete is not permitted.
    b. Concrete to be mechanically consolidated during placement per ACI standards.
    c. Contractor shall coordinate placement of all openings, curbs, dowels, sleeves, conduits, bolts, inserts and other embedded items prior to concrete placement.
    d. All embeds, anchors and dowels shall be securely tied to formwork or to adjacent reinforcing prior to the placement of concrete.
    e. No pipes, ducts, sleeves, etc shall be placed in structural concrete unless specifically detailed or approved by the structural engineer. Penetrations through walls when approved shall be built into the wall prior to concrete placement. Penetrations will not be allowed in footings or grade beams unless detailed. Piping shall be routed around footings and grade beams and unless detailed. Footings shall be stepped to avoid piping.
    f. Reinforcing Bars shall not be welded. Do not substitute reinforcing bars for DBAs or HSAs.

POST-INSTALLED ANCHORS

1. General Post-Installed Anchor Notes
   a. Do not install adhesive anchors in concrete if less than 21 days old; do not install mechanical anchors, screw anchor or powder actuated anchors in concrete less than 7 days old. Contractor must obtain written approval from the engineer to install prior to these time periods. Do not apply full load to anchors until concrete has reached 28-day compression strength.
   b. Anchors or adhesives specified in details shall be provided; alternative anchors or adhesives may be used if the contractor provides calculations demonstrating that the alternative can achieve the performance values of the specified product. These calculations, along with an ICC-ES ESR or IAPMO-UES ER approval for use in cracked concrete and compliant with the specified codes herein, must be submitted to the structural engineer prior to use.
   c. Follow all the manufacturer's recommendations and certification testing reports for anchor installation. See specific anchors below for more information.
   d. No anchor shall be installed within 1.5 anchor rod diameters of an abandoned hole that has been filled with non-shrink grout; increase distance to 3 anchor rod diameters when the abandoned hole has not been filled.
2. Adhesive Anchors
   a. For anchors in concrete, the adhesives shall be divided into two groups: Standard Adhesives and High Strength Adhesives. Standard adhesives can be used in general applications when details reference the "Standard Adhesive Embedment Schedule" in drawings. High Strength adhesive groups will be specified for the particular application in the drawings and details. When a High Strength Adhesive is specified, the contractor has the option to use any of the adhesives in the High Strength group. When a Standard Adhesive is specified, the contractor has the option to use any of the adhesives in either group. See below for the acceptable adhesives in each group.
      i. Standard Adhesive Group for anchors in concrete includes the following adhesives:
         1. SET-XP (ICC-ES ESR-2508) by Simpson Strong-Tie
         2. Pure 50+ (ICC-ES ESR-3576) by Dewalt
         3. AC100+ Gold (ICC-ES ESR-2582) by Dewalt
         4. HIT-RE 100 (ICC-ES ESR-3829) by Hilti, Inc.
      ii. High Strength Adhesive Group for anchors in concrete includes the following adhesives:
         1. SET-3G (ICC-ES ESR-4057) by Simpson Strong-Tie
         2. Pure 110+ (ICC-ES ESR-3298) by Dewalt
         3. AC200+ (ICC-ES ESR-4027) by Dewalt
         4. HIT-RE 500-V3 (ICC-ES ESR-3814) by Hilti Inc.
         5. HIT-HY 200 (ICC-ES ESR-3187) by Hilti Inc.
   b. For anchors in grouted masonry, the adhesive shall be HIT-HY-200-A (ICC-ES ESR-3963) by Hilti Inc., HIT-HY-200-R (ICC-ES ESR-3963) by Hilti Inc., SET-XP (IAPMO UES ER-265) by Simpson Strong-Tie Inc. or AT-XP (IAPMO UES ER-281) by Simpson Strong-Tie Inc., AC100+ (ICC-ES ESR-3200) by Dewalt or CIA GEL (ICC-ES ESR-1702) by USP.
   c. For anchors in ungrouted masonry, the adhesive shall be HIT-HY 270 (ICC-ES ESR-4143) by Hilti Inc., or SET (ICC-ES ESR-1772) by Simpson Strong-Tie Inc. or AC100+ (ICC-ES ESR-3200) by Dewalt. Plastic mesh or stainless steel screen tubes shall be used.
   d. Adhesive shall be within the manufacturer's recommended life time and prior to expiration date. Do not use adhesive that has not been stored per manufacturer's recommendations or may have experienced freeze thaw cycles or extreme heat.
   e. Do not install adhesive anchor in wet or damp hole unless product is approved for such conditions without strength reduction. Do not install adhesive anchors if concrete temperature is below 50-degree F unless adhesive is approved for lower temperature without strength reduction. Refer to manufacturer's published installation instructions.
   f. Follow all the manufacturer's recommendations and certification testing reports regarding hole cleaning prior to adhesive installation. All holes shall be drilled with ANSI standard bits designed for concrete. Diamond core drilled holes are not allowed unless indicated in specific details or approved by the structural engineer prior to use.
3. Mechanical Anchors
   a. For concrete, the mechanical anchor shall be Kwik Bolt TZ2 (ICC-ES ESR-4266) by Hilti Inc., Strong-Bolt 2 (ICC-ES ESR-3037) by Simpson Strong-Tie Inc. or Power-Stud+ SD2 (ICC-ES ESR-2502) by Dewalt.
   b. For grouted masonry, the mechanical anchor shall be Kwik Bolt 3 (ICC-ES ESR-1385) by Hilti Inc., Wedge-All (ICC-ES ESR-1396) by Simpson Strong-Tie or Strong-Bolt 2 (IAPMO-UES ER-240) by Simpson Strong-Tie or Power-Stud+ SD1 (ICC-ES ESR-2965) by Dewalt.

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REV	DATE	DESCRIPTION
1	08-25-2023	ADDENDUM 1
2	09-08-2023	FOOTING REVISION
3	10-5-2023	ASI 01
4	11-1-2023	CD Set

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

GENERAL STRUCTURAL NOTES

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GENERAL STRUCTURAL NOTES

4. Screw Anchors
   a. For concrete and grouted masonry, the screw anchors shall be Titen HD (ICC-ES ESR-2713 for concrete only and ICC-ES ESR-1056 for grouted masonry) by Simpson Strong-Tie, or Screw-Bolt + (ICC-ER ESR-3889 for concrete only) by DeWalt, Screw-Bolt+ (ICC-ES ESR-4042 for grouted masonry) by Dewalt, or Kwik HUS-EZ (ICC-ES ESR-3027 for concrete only and ICC-ES ESR-3056 for grouted masonry) by Hilti Inc.

5. Powder Actuated Fasteners
   a. For fasteners driven into steel (except at metal decks), concrete. or concrete over metal deck, the fastener shall be X-U P8 TH Universal Knurled Shank Fastener (ICC-ES ESR-2269) by Hilti Inc., PDPA (ICC-ES ESR-2138) by Simpson Strong-Tie Inc. or 8mm Head Spiral CSI Drive Pin (ICC-ES ESR-2024) by Dewalt.

MASONRY

1. Materials, unless noted otherwise:
   a. Concrete Masonry Units (CMU) ASTM C90: Normal weight (minimum net area unit strength of 2,000 psi). f'_m = 2,000 psi.
   b. Hollow Clay Masonry Units (HCMU) ASTM 652: Hollow Brick, Grade I (minimum net area unit strength of 4,950 psi) f'_m = 2,000 psi
   c. Mortar Cement ASTM C270: Use Type "S"
   d. Masonry Grout ASTM C476: grout shall attain a minimum compressive strength of 2,500 psi at 28 days.
   e. Reinforcing Steel — ASTM 615 Grade 60 (Fy = 60 ksi)
   f. Deformed Bar Anchors (DBA) — ASTM A496
   g. Headed Stud Anchors (HSA) — ASTM A108
   h. Anchor Rods — ASTM F1554, Grade 36 with ASTM A563 heavy hex nuts and ASTM F436 hardened washers

2. Reinforcement shall have the following cover:
   a. Typical reinforcement shall have a minimum coverage of one bar diameter over all the bars, but not less than 3/4". When masonry is exposed to soil, minimum coverage shall be 1.1/2".

3. Detailing Requirement
   a. Lap all masonry reinforcing per "Masonry Reinforcing Lap Schedule" in drawings.
   b. All vertical reinforcing shall be doweled to the foundation wall, footing (structure below) and to the structure below with the same size dowel, spacing (and in the same core) as the vertical wall reinforcing above.
   c. Corner Bars: Provide corner bars at intersecting wall corners using the same bar size and spacing as the horizontal wall reinforcing. Corner bars shall lap the horizontal reinforcing with the required lap splice length. See "Typical Corner Wall Reinforcing" detail in drawings.
   d. Horizontal wall reinforcing shall be continuous through joining concrete walls, masonry walls, columns, and pilasters. Provide a key between the wall and the column or pilaster. Horizontal wall reinforcing shall be placed inside the column vertical reinforcing.
   e. Horizontal wall reinforcing shall terminate with a hook at edge of openings and at each side of control joints except at floor and roof levels, lintels, beams and at top of parapets. See details in drawings.
   f. All masonry column ties shall terminate with 135-degree hooks plus a 6-bar diameter extension (4" minimum).

4. Construction Requirements:
   a. Masonry coursing shall be coordinated with the architectural drawings.
   b. All units shall be laid with full mortar beds on the face shells. All head joints shall be filled solidly with mortar for a distance in from the face of the units not less than the thickness of the longitudinal face shells. Cells which are to be grouted shall have full head joints.
   c. Masonry walls, beams and columns shall be constructed with running bond, unless noted otherwise.
   d. All cells containing reinforcement, embeds, anchor bolts, etc. shall be filled solid with grout. Grout shall be placed by mechanical vibration during placing and re-vibrated after excess moisture has been absorbed but before workability is lost. Rodding of grout is not allowed.
   e. Where walls are not grouted solid, each grout pour shall terminate flush with the top of the uppermost unit except at cells with vertical reinforcing where the grout shall be 1.1/2" below top of unit to provide construction key.
   f. Grout pours shall be limited to 5'-4" unless written approval is obtained from the engineer of record.
   g. All walls below grade shall be grouted solid.
   h. Vertical cells to be filled with grout shall have vertical alignment sufficient to maintain a clear, unobstructed vertical cell measuring not less than 2" by 3". All steel reinforcement shall be secured against displacement prior to grouting by wire positioners or other suitable devices at intervals not exceeding 200 bar diameters or 10 ft maximum, or at bar splice locations. Vertical reinforcing shall be located at the center of the wall unless noted otherwise
   i. Reinforcing Bars shall not be welded. Do not substitute reinforcing bars for DBAs or HSAs.
   j. Control Joints: Spacing shall not exceed 30'-0". Control joints shall not be placed any closer than 4'-0" to edge of openings. Control joints shall not be placed in the middle of masonry piers. See architectural drawings for locations.
   k. Grout all beam and joist pockets solid after installation of beams and joists.
   l. Embed channels and plates shall be placed so as to create a flush surface with the face of the wall.
   m. Anchor bolts and headed stud anchors shall be set in a grouted cell. Anchor bolts and headed stud anchors shall have 1" grout surrounding the shank at its penetration. Grout shall be flush with the face or top of the masonry.
   n. Pipes, conduits, and ducts shall not be placed in grouted cells without written approval from engineer.
   o. No aluminum conduit or product containing aluminum or any other material injurious to the masonry or grout shall be embedded in the masonry.
   p. Contractor shall coordinate placement of all openings, dowels, sleeves conduits, bolts, inserts and other embedded items prior to placing grout.

MASONRY VENEER

1. Masonry veneer shall be attached to steel stud walls with *Dur-O-Wal* DA 213 seismic veneer anchors or *Hohmann & Barnard* DW-10 or DW-10HS seismic veneer anchors (or equal) spaced at 16" o.c. Veneer anchors shall be attached to studs with #10 corrosion resistant self-drilling screws. Attach the veneer to the anchors with *Dur-O-Wal* Seismic Steel Pintles or *Hohmann & Barnard* 3/16" Ø Byna-Tie with Seismiclips (or equal) spaced at a maximum of 16" o.c. in both directions. Anchor ties shall engage to a galvanized No. 9 gauge horizontal joint reinforcement wire in the veneer, which shall be continuous and shall be placed at 16" o.c. maximum at the center of the veneer. At walls with rigid insulation use Hohmann & Barnard X-SEAL S.I.S. veneer anchors.

2. Other methods of attachment may be used after written acceptance by the architect and structural engineer.

3. Steel Lintels: Provide steel angle lintels at all openings through the masonry veneer. See Structural Steel section for requirements.

STRUCTURAL STEEL

1. Material:
   a. Wide Flange Sections — ASTM A992 (50 ksi)
   b. All Thread Rods, Other Shapes & Plates — ASTM A36 (36 ksi) or ASTM A572 Gr 50 (50 ksi) where indicated on plans.
   c. Square or Rectangular HSS — ASTM A500 (50 ksi) Grade C or ASTM A1085 (50ksi)
   d. Deformed Bar Anchors (DBA) — ASTM A496
   e. Headed Stud Anchors (HSA) — ASTM A108
   f. Non-Metallic Shrinkage Resistant Grout — ASTM C 1107
   g. Anchor Rods — ASTM F1554, Grade 36, with ASTM A563 heavy hex nuts and ASTM F436 hardened washers Grade A
   h. Bolted Connections: — ASTM F3125 Grade A325 with ASTM A563 nuts and ASTM F436 hardened washers.

2. Fabrication and construction shall comply with the latest edition of the following Codes and Standards:
   a. American Institute of Steel Construction (AISC), "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings," with "Commentary".
   b. AISC "Code of Standard Practice" excluding the following: Section 3.2, Section 4.4, Section 4.4.1,
   c. AISC "Specification for Structural Joints Using High-Strength Bolts"
   d. American Welding Society (AWS), Structural Welding Code (specific items do not apply when they conflict with the AISC requirements).
   e. AISC "Seismic Provision for Structural Steel Buildings"- ANSI/AISC 341
   f. All exterior steel elements, including anchor rods and bolts shall be hot-dip galvanized in accordance with ASTM A123 and A153 where applicable.

3. Welding
   a. Field weld flags that have been put in these documents are for suggestion only. The contractor has the option to substitute shop welding for field welding or vice versa. The steel fabrication and steel erection drawings must clearly distinguish between shop welds and field welds prior to any work being performed.
   b. Steel fabricators shall indicate the shop welds that are excluded from their bids. Steel erectors shall indicate the field welds that are excluded from their bids. It is the responsibility of the contractor to coordinate shop welding and field welding with the appropriate subcontractors.
   c. All welding and cutting shall be performed by AWS certified welders.
   d. Use E-70 XX (58 ksi yield, 70 ksi tensile) unless noted otherwise. E60 XX may be used for welding steel decks.
   e. All intersecting steel shapes which are not bolted shall be connected by a fillet weld all around, unless noted otherwise. Where fillet weld sizes are not shown they shall be 1/16" less than the thinnest of the connected parts for thicknesses 1/4" and larger. Fillet welds on plates less than 1/4" shall be of the same size as the thinnest of the connected part.
   f. Reinforcing Bars: Do not weld rebar. Do not substitute reinforcing bars for deformed bar anchors (DBAs), machine bolts, or headed stud anchors (HSAs).
   g. Do not weld anchor bolts, including "tack" welds.
   h. Headed Stud Anchors (HSAs) welding and deformed bar anchor welding shall conform to the manufacturer's specifications.

4. Bolted Connections:
   a. Use bolts for steel-to-steel connections, as noted herein or as noted on the drawings. Bolts shall be used in connections for simple span framing and beam (or girder) to bearing plate connections. Tighten bolts to a snug tight condition. See bolted connections schedule in drawings.
   b. Use hardened washers beneath the turned element of all bolts or nuts. Use hardened beveled washers, to compensate for the lack of parallelism, where the outer face of the bolted parts has a slope greater than one in twenty with respect to the plane normal to the bolt axis. At oversized holes hardened washers or plates shall conform with ASTM F-436 and shall completely cover the slot after installation.
   c. Where a steel-to-steel beam connection is not shown, provide a standard AISC framed connection for one half the total uniform load capacity of the beam for the span and steel specified.
   d. Bolts, nuts and washers shall not be reused.

5. Steel Lintels: Provide steel angle lintels at all openings through masonry veneer. Provide 1" of bearing for each foot of width of opening with a minimum bearing of 6". See the "Veneer Lintel Schedule" in drawings for size. Steel lintel angles shall be galvanized at all exterior conditions where exposed to weather.

6. Provide baseplate anchor rod connections to concrete elements that correlate with ACI 117. Circular or square washers are acceptable:

ANCHOR ROD DIAMETER	HOLE DIAMETER	WASHER SIZE	WASHER THICKNESS (MIN)
3/4"	1.5/16"	2"	1/4"
7/8"	1.9/16"	2.1/2"	5/16"
1"	1.7/8"	3"	3/8"
1.1/4"	2.1/8"	3.1/2"	1/2"
1.1/2"	2.3/8"	4"	1/2"
1.3/4"	2.7/8"	4.1/2"	5/8"
2"	3.1/4"	5"	3/4"
2.1/2"	3.3/4"	5.1/2"	7/8"

7. Provide full-depth web-stiffener plates where indicated in the details including at each side of all beams at all bearing points. Stiffener plate thickness shall be the greater of the following:
   a. 1/4"
   b. 1/2 the thickness of the beam flange
   c. 1/16 the width of the stiffener (half the beam flange width).
   d. 1/32 the depth of the beam
   Stiffener plates shall be welded on one side with fillet welds all around. The size of the fillet weld shall be 1/2 the stiffener plate thickness or 3/16" min.

COMPOSITE STEEL BEAMS

1. Headed Stud Anchors:
   a. Headed stud anchors shall 3/4" diameter and shall extend 1.1/2" above the top of the steel deck after welding. Headed stud anchors shall be welded through the metal deck to the top flange of the steel section or welded directly to the steel section.
   b. Anchors for composite steel beams are marked on the framing plans as "(x)". Locate anchors on composite steel beams (or segments of a beam) based on the following criteria:
      i. The number inside the brackets indicates the quantity of headed studs for the beam or segment of beam. When only one set of brackets is indicated, the headed studs shall be spaced uniformly over the entire beam length. For multiple sets of brackets, the headed studs shall be spaced uniformly over the segment of a beam associated with that set of brackets. Beam segments are delineated by adjoining framing members.
      ii. For steel beams perpendicular to deck corrugations: Place anchors in bottom of deck flutes. Where the number of uniformly placed anchors requires more than 1 anchor per deck corrugation, the first row shall be a complete uniform row with the remainder of the anchors placed in a second row equally at each end of the beam/segment.
      iii. For steel beams parallel to deck corrugations: Place anchors uniformly along beam the entire beam length/segment. The minimum center-to-center spacing of anchors shall be 4.1/2". Where the number of uniformly placed anchors is spaced at less than 4.1/2" o.c., the first row shall be a complete uniform row at 4.1/2" o.c. with the remainder of the anchors placed in a second row equally at each end of the beam/segment.
      iv. Anchors shall be placed in a single row within 1/4" of the center of the steel beam web. Where two rows of anchors are required, provide 3" center-to-center spacing between rows of anchors transverse to the steel beam web.
      v. The maximum center to center spacing shall not exceed 36".

2. Camber:
   a. Specific composite beams shall be precambered at the mid span. c= x" on the plans denotes pre-camber dimension (upward) in inches.
   b. Where a camber is not indicated at a steel beam, assume that c=0".

OPEN WEB STEEL JOISTS

1. All open web steel joist shall be fabricated and erected in accordance with the latest edition of Steel Joist Institute (SJI), "Standard Specifications and Code of Standard Practice".

2. At the completion of fabrication, the steel joist manufacturer shall submit to the building official a certificate of compliance in accordance with IBC Section 1704.2.5 stating if the work was performed in accordance with approved construction documents and with SJI standard specifications.

3. Joists with slopes greater than 1/2" per foot shall be designed to meet or exceed the load capacities, listed in the SJI load tables, of the joist sizes indicated on the framing plan, as if the joists or girders were installed level.

4. Provide special bearing ends to accommodate slopes from sloped joists, or sloped bearing conditions.

5. Modifications to any joist, including holes through the top and bottom chords, without the written consent and direction from the manufacturer are not allowed.

6. Joist loads called out in the drawings are allowable stress design (ASD) loads.

7. Open web joist deflection shall be limited to L/240 for total loads and L/360 for roof live loads, unless noted otherwise on plans (i.e.: at partition door in Multi Purpose Room). The SJI required camber can be subtracted when considering the total load deflection requirements.

8. Camber joist per typical SJI requirements, unless noted otherwise on plans.

9. Joist bridging shown on plans is for schematic purposes only; actual size, quantity and location of bridging shall be determined by the joist supplier per SJI. Coordinate bridging locations to avoid interference with mechanical, electrical and fire protection equipment and skylights.

METAL DECKING

1. Steel deck shall comply with the latest requirements of the Steel Deck Institute.

2. All deck shall be 3-span continuous minimum. In areas where 3-span conditions are not possible, the contractor shall provide heavier gage deck as required to provide the equivalent loading of the deck under a three span condition.

3. Steel roof deck shall not be used to support loads from plumbing, HVAC ducts, light fixtures, architectural elements or equipment of any kind, unless specifically noted. Light weight suspended acoustical ceilings with a total weight of 50 lbs per attachment may be hung from roof deck. The hangers shall be staggered to distribute the loads over multiple deck flutes.

4. Conduits are permitted in composite deck slabs subject to local code requirements and fire rating considerations. Conduits other than electrical or communication conduits shall not be permitted. When conduits are installed in the slab, the diameter shall be the lesser of 1" or 1/3 times the depth of concrete cover over the metal deck.
   a. No crossover of conduits shall occur.
   b. Conduit shall be spaced a minimum of 18" apart.
   c. The minimum clearance between conduit and the metal deck shall be 1".

5. All deck supporting members shall be dry before welding.

6. Clinch seams before welding interlocking seams.

Steel Floor Deck

a. Steel floor deck shall be 3" deep X 20 gage minimum (or 19 gage minimum where indicated on plans) phosphatized/painted composite type "W" deck with interlocking side seams with the following properties:

	20 Gage	19 Gage	18 Gage	16 Gage
Minimum S ($in^3/_{ft}$) =	0.528	0.652	0.768	0.966
Minimum I ($in^4/_{ft}$) =	0.907	1.067	1.213	1.516

Deck shall be galvanized (G60) when used below mechanical equipment rooms.

b. Steel deck with 3.1/4" thick (6.1/4" overall) light weight concrete slab shall have a minimum allowable diaphragm shear capacity of 1597 lbs/ft for a 12'-0" deck span.
c. Fasten deck to supporting framing members with powder-driven fasteners. Powder-driven fasteners shall be as indicated below based on the steel framing thicknesses.

Steel Framing Thickness	Fastener	ICC-ESR or IAPMO report number
0.125" to 0.375"	Hilti X-HSN-24	ICC-ESR 2776
0.25" and up	Hilti X-ENP-19 L15	ICC-ESR 2776
0.113" to 0.155"	Pneutek SDK61075	ICC-ESR 2941
0.155" to 0.250"	Pneutek SDK63075	ICC-ESR 2941
0.188" to 0.312"	Pneutek K64062	ICC-ESR 2941
0.281" and up	Pneutek K66062	ICC-ESR 2941

d. Fasteners shall be placed at the following spacings (Closer spacings may be used to develop minimum shear requirements):
   vi. 12" o.c. to supports perpendicular to deck corrugations (4 fasteners per 36" wide sheet).
   vii. 12" o.c. to all supports parallel to deck corrugations.
e. In lieu or mechanical fasteners, contractor may weld deck to supporting framing members with 3/4" diameter puddle welds at the same spacing for deck pins as indicated above.
f. Attach interlocking seams with one of the following.
   i. 3/16" Ø button punch — at 18" o.c.
   ii. 1.1/2" long top seam welds — at 36" o.c.
   iii. Verco PunchLok II System — at 36" o.c.
   iv. ASC DeltaGrip System — at 36" o.c.
   v. CSI Inter-Knek — at 36" o.c.
   Closer spacing may be used to develop minimum shear requirements.
g. Provide a 2" minimum bearing at supports.

Steel Roof Deck

a. Typical steel roof deck shall be 1.1/2" deep X 20 gage minimum (or 16 gage minimum where indicated on plans) painted, type "B" wide rib deck with interlocking side seams with the following properties:

	20 Gage	18 Gage	16 Gage
Minimum S ($in^3/_{ft}$) =	0.237	0.331	0.410
Minimum I ($in^4/_{ft}$) =	0.231	0.306	0.381

   1. Minimum allowable deck diaphragm shear values shall be 760 lbs/ft for a 7'-0" deck span.
   2. Maximum diaphragm flexibility factor shall be 140 kips/in for a 7'-0" deck span.

b. At Multipurpose Room, steel roof deck shall be 3" deep X 22 gage minimum painted, type "N" wide rib deck with interlocking side seams with the following properties:

	22 Gage
Minimum S ($in^3/_{ft}$) =	0.405
Minimum I ($in^4/_{ft}$) =	0.785

   1. Minimum allowable deck diaphragm shear values shall be 419 lbs/ft for a 10'-6" deck span.
   2. Maximum diaphragm flexibility factor shall be 73 kips/in for a 10'-6" deck span.
c. Fasten deck to supporting framing members with powder-driven fasteners. Powder-driven fasteners shall be as indicated below based on the steel framing thicknesses:

Steel Framing Thickness	Fastener	ICC-ESR or IAPMO report number
0.125" to 0.375"	Hilti X-HSN-24	ICC-ESR 2776
0.25" and up	Hilti X-ENP-19 L15	ICC-ESR 2776
0.113" to 0.155"	Pneutek SDK61075	ICC-ESR 2941
0.155" to 0.250"	Pneutek SDK63075	ICC-ESR 2941
0.188" to 0.312"	Pneutek K64062	ICC-ESR 2941
0.281" and up	Pneutek K66062	ICC-ESR 2941

d. Fasteners shall be placed at the following spacings (Closer spacings may be used to develop minimum shear requirements):
   i. 6" o.c. to all supports perpendicular to deck corrugations (7 fasteners per 36" sheet).
   ii. 6" o.c. to all supports parallel to deck corrugations.
e. In lieu or mechanical fasteners, contractor may weld deck to supporting framing members with 3/4" diameter puddle welds at the same spacing for deck pins as indicated above.
f. Attach interlocking seams with one of the following.
   i. Verco PunchLok II System — at 24" o.c. maximum (4" o.c. where indicated on plans)
   ii. 1.1/2" long top seam welds — at 24" o.c. maximum (4" o.c. where indicated on plans)
   Closer spacing may be used to develop minimum shear requirements. A standard button punch may **not** be used in place of Verco PunchLok.
g. Provide a 2" minimum bearing and a 4" lap at the splice points.

COLD-FORMED STEEL

1. All cold-formed steel shall meet the requirements of "Specifications for the Design of Cold-Formed Steel Structural Members" by American Iron and Steel Institute (AISI).

2. All cold-formed steel connectors shall be provided by The Steel Network. If the contractor elects to substitute for another manufacturer, the contractor shall submit a revised connector list, prior to construction, that includes the following information:
   a. Specified connector indicated on these plans
   b. Requested substitution connector
   c. Allowable capacity of the requested substitution connector

3. Light Gauge Steel Framing:
   a. Galvanized steel shall meet the minimum requirements of ASTM A653 (Fy = 50 ksi) for 97 mil (12 gauge), 68 mil (14 gauge) and 54 mil (16 gauge). For 43 mil (18 gauge) and lighter galvanized steel shall meet and ASTM A653 (Fy = 33 ksi). Galvanized coatings must meet the ASTM A924.
   b. Follow all manufacturers' recommendations for the use of these products.
   c. Unless noted otherwise, all welded connections shall be done according to AWS standards.
   d. All interior non-bearing steel-stud walls that extend above the ceiling but do not attach to the structure above shall be brace with diagonal metal-stud braces (45 degrees). The kl/r ratio of the brace shall not exceed 200 and shall not be spaced further apart than 10'-0" o.c. Connect diagonal braces to the top of the steel stud walls and to the top flange of the steel beams with two #10 tek screws minimum. Where a concrete deck occurs above, use two powder-driven fasteners per diagonal brace. Other approved methods may be used.

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REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01
4	11-15-2023	CD Set
5	11-16-2023	Addendum 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

GENERAL STRUCTURAL NOTES

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REQUIREMENTS FOR SPECIAL INSPECTION, MATERIAL TESTING, AND STRUCTURAL OBSERVATION

STATEMENT OF SPECIAL INSPECTION AND QUALITY ASSURANCE

Special inspection and quality assurance (including structural testing), as required by section 1704 and 1705 of the 2021 IBC, shall be provided by an independent agency employed by the owner for the items in this section and other areas of the approved construction documents, unless waived by the building official.	
The names and credentials of the Special Inspectors to be used shall be submitted to the Building Official for approval.	
Responsibilities of the Special Inspector	
	Special Inspector shall review all work listed in the special inspection schedules herein for conformance with the approved construction plans, specifications and 2021 IBC.
	Testing and inspection reports shall be sent on a weekly basis to the architect, engineer, building official and contractor for review. All items not in compliance shall be brought to the immediate attention of the contractor for correction, and if uncorrected, to the architect, engineer and building official.
	Once corrections have been made by the contractor, the special inspector shall submit a final signed report to the building official stating that the work requiring special inspection was, to the best of the special inspector's knowledge, in conformance with the approved construction plans, specifications and 2021 IBC.
Responsibilities of the Contractor	
	The contractor shall submit a written statement of responsibility to the owner and the building official prior to the commencement of work in accordance with 2021 IBC section 1704.4. This statement shall indicate that the contractor will coordinate and cooperate with the required inspections contained herein.
	The contractor shall notify the designated special inspector that work is ready for inspection at least 24 hours before said inspection is required.
	All work requiring special inspection shall remain open and accessible until it has been observed by the special inspector and deemed acceptable through inspection report.
	Special inspection during fabrication is not required if the fabricator is registered and approved by the authority having jurisdiction to perform such work without special inspection. Upon completion of fabrication, the approved fabricator shall submit a certificate of compliance for submittal to the building official.
	The contractor shall be responsible for their own quality control including materials, fabrication, erection, etc.

SOILS CONSTRUCTION INSPECTIONS

Soils (2021 IBC Section 1705.6, and Table 1705.6)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Site Preparation	-	X	Verify excavations are extended to proper depth and have reached proper materials. Verify that the site has been prepared in accordance with the soils report prior to placement of prepared fill.
Fill Material	X	-	Verify, during fill placement, that the material being used and procedures in accordance with the provisions of the approved geotechnical report. Verify densities and lift thicknesses during placement and compaction of the fill.
Site Preparation	-	X	Verify excavations are extended to proper depth and have reached proper materials. Verify that the site has been prepared in accordance with the Earthwork section of the General Structural Notes and per recommendations by a geotechnical engineer (if required) prior to placement of prepared fill.
Fill Material	X	-	Verify that the material being used, the maximum lift thickness and the in-place dry density of the compacted fill material comply with the Earthwork section of the General Structural Notes and per recommendations by a geotechnical engineer (if required) during placement and compaction.
Continuous Footing Backfill: at least one test for each 40 linear feet or less of wall length, but no fewer than 2 tests.	-	X	At each compacted backfill layer.
Spot Footing Backfill: Minimum of one compaction test for each lift for each spot footing.	-	X	At each compacted backfill layer.
See specifications for further requirements.	-	-	

CONCRETE CONSTRUCTION INSPECTIONS

Concrete (2021 IBC Section 1705.3, Table 1705.3, and Section 1904) The following concrete elements require special inspection:

All concrete footings, All concrete walls, Interior concrete slab-on-grade, Concrete fill over metal deck

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Protection of concrete during cold and hot weather	-	X	Verify maintenance of specified curing temperature and techniques
Verify materials used including use of the required mix design	-	X	Verify Use of required design mix. Verify mix design meets strength and exposure requirements listed on General Structural Notes
Formwork	-	X	Verify shape, location and member dimensions
Testing of concrete prior to concrete placement	-	X	Fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.
Bolts installed in concrete	X	-	Inspection of anchors or embeds cast in concrete is required when allowable loads have been increased or where strength design is used. Prior to and during concrete placement.
Embeds and Inserts installed in concrete	X	-	Prior to and during concrete placement.
Concrete reinforcing steel placement	-	X	Verify that reinforcing is of specified type, grade and size; that it is free of oil, dirt and rust; that it is located and spaced properly; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report.
Concrete placement and samples	X	-	Cylinders, slump, temperature and air-entrainment shall be done for every 150 cubic yards or each day's production if the day's production is less than 150 cubic yards nor less than once for each 5000 sq. ft of surface area for slabs and walls.
See specifications for further concrete testing requirements.	-	-	

POST-INSTALLED ANCHOR INSPECTIONS

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Post-Installed Anchors and Reinforcing Bars (2021 IBC Section 1705.1.1)			
Adhesive Anchors and Reinforcing Bars	X	-	Special inspection shall be performed per manufacturer's requirements and approved ICC-ES reports noted in POST-INSTALLED ANCHOR section of the General Structural Notes prior to installation of epoxy and anchor rod. If the anchor is not installed in a horizontal, upwardly inclined or overhead orientation meant to resist sustained tension loads, special inspection may be reduced to a periodic frequency.
Mechanical Anchors and Screw Anchors	-	X	Special inspection shall be provided per manufacturer's requirements and approved ICC-ES reports noted in POST-INSTALLED ANCHOR section of the General Structural Notes prior to installation of mechanical or screw anchor.

MISCELLANEOUS STEEL CONSTRUCTION INSPECTIONS

Structural Welding of Composite Construction (2021 IBC section 1705.2 and section 1705.13.1 and section 1705.14.1 and AISC 360-16 Chapter N and AISC 341-16 Chapter J)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Placement and installation of steel headed stud anchors (HSA)	X	-	Inspection of steel elements of composite construction prior to concrete placement for each welded joint or member.

Metal Deck Construction (2021 IBC section 1705.2.2, AWS D1.3, and section 6.1 of SDI QA/QC-2011)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Material verification of metal deck(s)	-	X	Confirm that identification markings are provided that conform to applicable ASTM standards specified on construction documents
Placement and installation of metal deck	-	X	Confirm that the deck is installed per the approved construction documents, installation drawings, shop drawings and applicable reference standards.
Steel deck welding/fastening (prior to concrete placement at floor)	-	X	Visual inspection is required to verify size and spacing of welds/fasteners for deck attachment to the supporting structure. Also verify spacing and size of side-seam attachments. Confirm that welds/fasteners meet acceptance criteria of applicable referenced standards and manufacturer's instructions. Where applicable, welder qualifications should be verified.

STEEL BOLTED CONSTRUCTION INSPECTIONS

Where special inspections are listed under "Random Basis", special inspection of elements and items shall be performed on a random basis. Operations need not be delayed pending these inspections. Where special inspection items are listed under "Every Element", special inspection shall be performed for each element, joint, or member, as applicable based on the task listed below.

High Strength bolted connections (2021 IBC section 1705.2.1, section 1705.13.1 and section 1705.14.1 and AISC 360-16 Chapter N and AISC 341-16 Chapter J)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION PLAN		COMMENTS
	Every Element	Random Basis	
Inspection Tasks Prior to Bolting			
Manufacturer's certifications available for fastener materials	X	-	
Fasteners	-	X	Marked in accordance with ASTM requirements
Proper fasteners selected for the joint detail	-	X	Including grade, type, bolt length if threads are to be excluded from shear plane.
Proper bolting procedure selected for joint detail	-	X	
Connecting elements	-	X	Including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements
Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used	-	X	Not required if only snug-tight joints are specified per [Section N5.6(1) of AISC 360-16])
Proper storage	-	X	Storage provided for bolts, nuts, washers and other fastener components
Inspection Tasks During Bolting			
Fastener assemblies, of suitable condition	-	X	Verify that fasteners placed in all holes and washers (if required) are positioned as required.
Joint	-	X	Verify that joint brought to the snug-tight condition (min) unless noted otherwise.
Fastener component	-	X	Verify that fastener component not turned by the wrench prevented from rotating
Pretensioned Fasteners	-	X	Verify that pretensioned fasteners are pretensioned in accordance with the RCSC *Specification*, progressing systematically from the most rigid point toward the free edges (Not required if only snug-tight joints are specified per [Section N5.6(1) of AISC 360-16]; Not required for pretensioned joints using turn-of-the-nut method with match-marking, direct-tension-indicators or twist-off type tension control bolt methods)
Inspection Tasks After Bolting			
Document acceptance or rejection of each bolted connection	X	-	

STEEL WELDED CONSTRUCTION INSPECTIONS

Definition of Terms

Where special inspections are listed under "Random Basis", special inspection of elements and items shall be performed on a random basis. Operations need not be delayed pending these inspections. Where special inspection items are listed under "Every Element", special inspection shall be performed for each element, joint, or member, as applicable based on the task listed below.

Structural Welding (2021 IBC section 1705.2.1 and section 1705.13.1 and section 1705.14.1 and AISC 360-16 Chapter N and AISC 341-16 Chapter J)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION PLAN		COMMENTS
	Every Element	Random Basis	
Inspection Tasks Prior to Welding			
Welding procedures specifications and manufacturer certifications for welding consumables shall be available	X	-	Welding procedures shall be submitted to the Engineer of Record for review.
Material identification (type/grade)	-	X	
Welder identification system	-	X	Verify there is a system in place to identify the welder who has welded a joint or member.
Fit-up of groove welds	X*	X	Including joint geometry, joint preparation, dimensions, cleanliness, tacking and backing type and fit.
Configuration and finish of access holes	-	X	
Fit-up of fillet welds	X*	X	Including alignment, gaps at root, dimensions, cleanliness and tacking.
Check welding equipment	-	X	
SRE Welds	X	-	Provide manufacturer's certifications that the filler metal meets the supplemental notch toughness requirements, as indicated in these documents. When the filler metal manufacturer does not supply such supplemental certifications, the fabricator or erector, shall have the necessary testing performed and provide the applicable test reports to the Engineer of Record for review.
*Required for elements designated in these structural drawings as "Seismic Resisting Elements – SRE". May be reduced from 'Every Element' to 'Random Basis' after ten satisfactory welds have been completed. Subsequently, the inspector may change the requirements from 'Random Basis' to 'Every Element' and vice versa at their discretion			
Inspection Tasks During Welding			
Use of qualified welders	-	X	
Control and handling of welding consumables	-	X	Including packaging and exposure control
Cracked tack welds	-	X	Verify no welding over cracked tack welds.
Environmental conditions	-	X	Including wind speed within limits and precipitation and temperature
WPS followed	-	X	Including settings on welding equipment, travel speed, selected welding materials, shielding gas type/flow rate, preheat applied, interpass temperature (min./max.) maintained, proper position (F, V, H, OH)
Welding techniques	-	X	Including interpass and final cleaning, each pass within profile limitations, each pass meets quality requirements
Inspection Tasks After Welding			
Welds cleaned	-	X	
Size, length and location of welds	X	-	
Welds meet visual acceptance criteria	X**	-	Including crack prohibition, weld/base-metal fusion, crater cross section, weld profiles, weld size, undercut and porosity.
Arc strikes, k-area, weld access holes for flanges greater than 2", backing removed and weld tabs removed (if required), repair activities	X**	-	When welding of doubler plates, continuity plates, or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks within 3" of the weld.
Ultrasonic testing (UT) for complete-joint-penetration (CJP) groove welds, partial penetration groove welds when used in column splices, and welds subject to fatigue	-	X	Perform UT on 10% of welds subject to transversely applied tension loading in butt, T- and corner joints, in material 5/16" thick or greater. For materials less than 5/16" thick, ultrasonic testing is not required. The UT rate must be increased to 100% if the rejection rate exceeds 5% of the welds tested. See Sections N5.5d and N5.5f for more information.
Placement of reinforcing or contouring fillet welds	X**		
Document acceptance or rejection of each welded joint or member	X**	-	
** Required for elements designated in these structural drawings as "Seismic Resisting Elements – SRE". All welding inspections and nondestructive testing shall satisfy the requirements above and AWS D1.8/D1.8M. The Inspector shall document the work has been performed in accordance with the contract documents, either in the shop or field, including noncompliant work and whether that work has been satisfactorily repaired			

OPEN-WEB STEEL JOIST CONSTRUCTION INSPECTIONS

Installation of open-web steel joists (IBC 2021 Section 1705.2.3, and Table 1705.2.3)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
End connections – welding or bolted	-	X	Follow SJI references listed in section 2207
Standard horizontal and diagonal bridging	-	X	Follow SJI references listed in section 2207
Bridging that differs from SJI specifications listed in section 2207.1	-	X	

NON-STRUCTURAL COMPONENT CONSTRUCTION INSPECTIONS

Architectural Components located in Seismic Design Categories C, D, E and F (2021 IBC Sections 1705.13.5 and 1705.13.7)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Exterior cladding, and exterior veneer	-	X	Verify attachments of exterior metal clad fastening systems, drift clips, veneer support angles and attachments, and all masonry, stone or rain screen seismic attachments.
Erection and fastening of interior and exterior nonbearing walls	-	X	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. (Not required if <30 feet or for interior walls < 15 psf.)

Mechanical and Electrical Components located in Seismic Design Categories C, D, E and F (2021 IBC Sections 1705.13.4 and 1705.13.6)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Designated seismic systems	-	X	Verify that manufacturer's certificate of compliance conforms to the requirements of Section 13.2 of ASCE 7-16. Verify that the label, anchorage or mounting conforms to the manufacturer's certificate of compliance.

MASONRY CONSTRUCTION INSPECTIONS

Prior to Construction (2021 IBC section 1705.4 and TMS 602 Table 3)

ITEM FOR VERIFICATION	COMMENTS
Verification of compliance of submittals	Verify that materials conform to the requirements of the approved submittals. Mix design, test results, material certificates, and construction procedures should be submitted for review.
Verification of f'm	Verify that materials conform to the requirements of the approved construction documents.
Verification of material certificates, mix designs, and test results	Mortar mix designs shall conform to ASTM C 270 while grout shall conform to ASTM C 476. Material certificates shall be provided for the following: reinforcement; anchors, ties, fasteners, and metal accessories; masonry units; mortar and grout materials. Construction procedures for cold-weather or hot-weather construction shall be reviewed.

As masonry construction begins (2021 IBC section 1705.4 and TMS 602 Table 4)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Proportions of site-prepared mortar, construction of mortar	-	X	
Grade, type and size of reinforcement, connector, and anchors	-	X	
Sample wall panel construction	-	X	Use materials and procedures accepted for the Work to create a minimum sample panel size of 4 ft by 4 ft. The acceptable standard for the Work is established by the accepted panel and retained at the project site until Work has been accepted.

Prior to grouting and during construction - Structural Masonry shall have Level 2 special inspection (2021 IBC section 1705.4 and TMS 602 Table 4)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Grout Space	-	X	Verify grout space is clean prior to grouting
Placement, grade, type and size of reinforcement, connectors and anchor bolts and anchorages	-	X	
Proportions of site-prepared grout	-	X	
Materials and procedures with the approved submittals	-	X	
Placement of masonry units and mortar joint construction	-	X	
Size and location of structural members	-	X	
Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction	-	X	
Protection of masonry during cold weather (below 40 deg F) and hot weather (above 90 deg F)	-	X	
Grout placement (including verification of Slump flow and Visual Stability Index (VSI) when self-consolidating grout is delivered to the project site.)	X	-	
Observe preparation of grout specimens, mortar specimens and/or prisms	-	X	The contractor has the option of using the "Prism Test Method" per ACI 530.1/ASCE 6/TMS 602 in lieu of the "Unit Strength Method."

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130 N. ECCLES AVE., OGDEN, UT 84404

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SPECIAL INSPECTIONS

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REQUIREMENTS FOR SPECIAL INSPECTION, MATERIAL TESTING, AND STRUCTURAL OBSERVATION

STRUCTURAL OBSERVATION PROGRAM

If structural observations are required, they shall be done by the Engineer of Record or an approved subordinate at the stages of construction listed in the Construction Notification Phases section of these notes. The structural observer shall visually observe representative locations of structural systems, details and load paths for general conformance with the approved construction documents. Structural observation does not include or waive the responsibility for the special inspections indicated in these structural drawings. At the conclusion of the project, the designated structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies that to the best of the structural observer's knowledge have not been resolved (See IBC 2021 1704.6).

STRUCTURAL OBSERVATION PROGRAM REQUIRED BY CODE:	YES	NO
	X	

CONSTRUCTION MILESTONE SCHEDULE

CONTRACTOR TO NOTIFY ENGINEER AT THE FOLLOWING CONSTRUCTION PHASES:	
CONCRETE	
Footings, stem walls and piers	Prior to pouring concrete
Concrete over metal floor deck	Prior to pouring concrete
STEEL	
Floor framing	After substantial portion of framing is erected
Roof framing	After substantial portion of framing is erected
Roof deck	After welding/fastening and prior to roofing
MASONRY	
Masonry walls	Prior to pouring grout

DEFERRED SUBMITTALS

For the purposes of this section, deferred submittals are defined as per section 107.3.4.1 of the IBC 2021. Submittal documents for deferred submittal items shall be submitted to the engineer, architect and building official for their review for general conformance with the design of the building.

DEFERRED STRUCTURAL SUBMITTALS FOR THIS PROJECT ARE
Open web steel joists (per IBC 2021 section 2207)

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REV	DATE	DESCRIPTION
2	09-08-2023	FOOTING REVISION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

SPECIAL INSPECTIONS

S004

11/8/2023 5:05:47 PM

REQUIREMENTS FOR SPECIAL INSPECTION, MATERIAL TESTING, AND STRUCTURAL OBSERVATION

STRUCTURAL OBSERVATION PROGRAM

If structural observations are required, they shall be done by the Engineer of Record or an approved subordinate at the stages of construction listed in the Construction Notification Phases section of these notes. The structural observer shall visually observe representative locations of structural systems, details and load paths for general conformance with the approved construction documents. Structural observation does not include or waive the responsibility for the special inspections indicated in these structural drawings. At the conclusion of the project, the designated structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies that to the best of the structural observer's knowledge have not been resolved (See IBC 2021 1704.6).

STRUCTURAL OBSERVATION PROGRAM REQUIRED BY CODE:	YES	NO
	X	

CONSTRUCTION MILESTONE SCHEDULE

CONTRACTOR TO NOTIFY ENGINEER AT THE FOLLOWING CONSTRUCTION PHASES:	
CONCRETE	
Footings, stem walls and piers	Prior to pouring concrete
Concrete over metal floor deck	Prior to pouring concrete
STEEL	
Floor framing	After substantial portion of framing is erected
Roof framing	After substantial portion of framing is erected
Roof deck	After welding/fastening and prior to roofing
MASONRY	
Masonry walls	Prior to pouring grout

DEFERRED SUBMITTALS

For the purposes of this section, deferred submittals are defined as per section 107.3.4.1 of the IBC 2021. Submittal documents for deferred submittal items shall be submitted to the engineer, architect and building official for their review for general conformance with the design of the building.

DEFERRED STRUCTURAL SUBMITTALS FOR THIS PROJECT ARE
Open web steel joists (per IBC 2021 section 2207)

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VCBO NUMBER: 230349
DATE: (Issue Date)

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No. 9072017-2203
TRAVIS ROSS BRACKUS
STATE OF UTAH

10-6-23

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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID SET 2 - FTG & FDN PACKAGE

SPECIAL INSPECTIONS

S005

10/6/2023 5:23:46 PM

LEGEND OF MARKS AND ABBREVIATIONS

AB	ANCHOR BOLT(S)	k	KIP(S) = 1000 POUNDS
ABV	ABOVE	KLF	KIPS PER LINEAL FOOT
ALT	ALTERNATE	KSF	KIPS PER SQUARE FOOT
APPROX	APPROXIMATE		
ARCH	ARCHITECT(URAL)	LBS	POUNDS
		LF	LINEAL FOOT
BLDG	BUILDING	LLH	LONG LEG HORIZONTAL
BLW	BELOW	LLV	LONG LEG VERTICAL
BM	BEAM	LSH	LONG SIDE HORIZONTAL
BOT	BOTTOM	LSV	LONG SIDE VERTICAL
BRG	BEARING		
BTWN	BETWEEN	MAS	MASONRY
		MAX	MAXIMUM
CC.	CENTER-TO CENTER	MCJ	MASONRY CONTROL JOINT
CC –x	CONCRETE COLUMN	MC-x	MASONRY COLUMN MARK
CGS	CENTER OF GROSS STEEL	MECH	MECHANICAL
C.J.	CONST/CONTROL JOINT	MFR	MANUFACTURER
CJP	COMPLETE JOINT PENETRATION GROOVE WELD (FULL PEN WELD)	MIN	MINIMUM
		MISC	MISCELLANEOUS
CMU	CONCRETE MASONRY UNIT	ML-x	MASONRY LINTEL
COL	COLUMN	MP-x	MASONRY PIER
CONC	CONCRETE	MW-x	MASONRY WALL
CONST	CONSTRUCTION	MSW	METAL STUD WALL
CP-x	CONCRETE PIER		
CTR	CENTER	NIC	NOT IN CONTRACT
CW-x	CONCRETE WALL	NTS	NOT TO SCALE
DB	DECK BEARING	O.C.	ON CENTER
DBA	DEFORMED BAR ANCHOR	O.F.	OUTSIDE FACE
DBE	DECK BEARING ELEVATION	OPNG	OPENING
DBL	DOUBLE	OPP	OPPOSITE
DET	DETAIL	OWSJ	OPEN WEB STEEL JOISTS
DIA	DIAMETER		
DIM	DIMENSION	PAF	POWDER-ACTUATED FASTENER
DN	DOWN	PCF	POUNDS PER CUBIC FOOT
DWG	DRAWING	PL	PLATE
DWL	DOWEL	PLF	POUNDS PER LINEAL FOOT
		PSF	POUNDS PER SQUARE FOOT
EA	EACH	PSI	POUNDS PER SQUARE INCH
E.N.	EDGE NAILING	PT	POINT
E.F.	EACH FACE		
E.J.	EXPANSION JOINT	REQD	REQUIRED
ELEC	ELECTRICAL	R.D.	ROOF DRAIN
ELEV	ELEVATION	RTU	ROOF TOP UNITS
E.O.D.	EDGE OF DECK		
E.O.S.	EDGE OF SLAB	SBP-x	STEEL BASE PLATE MARK
EQUIP	EQUIPMENT	SC-x	STEEL COLUMN MARK
EQ	EQUAL	SCP-x	STEEL CAP PLATE MARK
E.W.	EACH WAY	SHT	SHEET
EXT	EXTERIOR	SI	SPECIAL INSPECTION
		SIM	SIMILAR
FC-x	CONTINUOUS FOOTING MARK	SMU	SUSPENDED MECHANICAL UNITS
F.D.	FLOOR DRAIN	SOG	SLAB-ON-GRADE
FDN	FOUNDATION	SQ	SQUARE
F.F.	FINISHED FLOOR	STAG	STAGGERED
FR-x	RECTANGULAR FOOTING	STD	STANDARD
FS-x	SQUARE FOOTING MARK	STL	STEEL
FT	FOOT	STR	STRUCTURAL
FTG	FOOTING	STS	SELF TAPPING SCREWS
FTS-x	THICKENED SLAB MARK		
		T&B	TOP AND BOTTOM
GA	GAUGE	TEMP	TEMPERATURE
GALV	GALVANIZED	THDS	THREADS
GSN	GENERAL STRUCTURAL NOTES	T.O.	TOP OF
		TOC	TOP OF CONCRETE
HB	HORIZONTAL BRIDGING	TOD	TOP OF DECK
HORIZ	HORIZONTAL	TOF	TOP OF FOOTING
HSA	HEADED STUD ANCHOR	TOS	TOP OF STEEL
HT	HEIGHT	TOW	TOP OF WALL
		TYP	TYPICAL
ICC	INTERNATIONAL CODE COUNCIL	UNO	UNLESS NOTED OTHERWISE
IBC	INTERNATIONAL BUILDING CODE		
I.F.	INSIDE FACE	VERT	VERTICAL
IN.	INCH		
INT	INTERIOR	W/	WITH
		WT	WALL THICKNESS
JT	JOINT	WWF	WELDED WIRE FABRIC
JST	JOIST	WWM	WELDED WIRE MESH

SNOW DRIFT LEGEND

INDICATES AREA OF SNOW DRIFT. JOIST SUPPLIER TO ADD SNOW DRIFT LOAD TO JOISTS AND GIRDERS

xx psf / 0 psf / x'-x" — INDICATES ADDITIONAL LOADING DUE TO SNOW DRIFT (SEE SNOW DRIFT NOTE)
xx psf INDICATES LOAD AT HIGH POINT
x'-x" INDICATES LENGTH OF DRIFT

xx psf / x psf / x'-x" — INDICATES ADDITIONAL LOADING DUE TO SNOW DRIFT (SEE SNOW DRIFT NOTE)
xx psf INDICATES LOAD AT HIGH POINT,
x psf INDICATES LOAD AT LOW POINT
x'-x" INDICATES LENGTH OF DRIFT
SEE PLAN FOR SNOW DRIFT LOADING. THESE LOADS ARE IN ADDITION TO THE JOIST UNIFORM AND POINT LOADS SHOWN ON PLANS. JOIST SUPPLIER TO ADD SNOW DRIFT LOAD TO BOTH JOISTS AND GIRDERS

SNOW DRIFT NOTE

MARKS AND SYMBOLS LEGEND

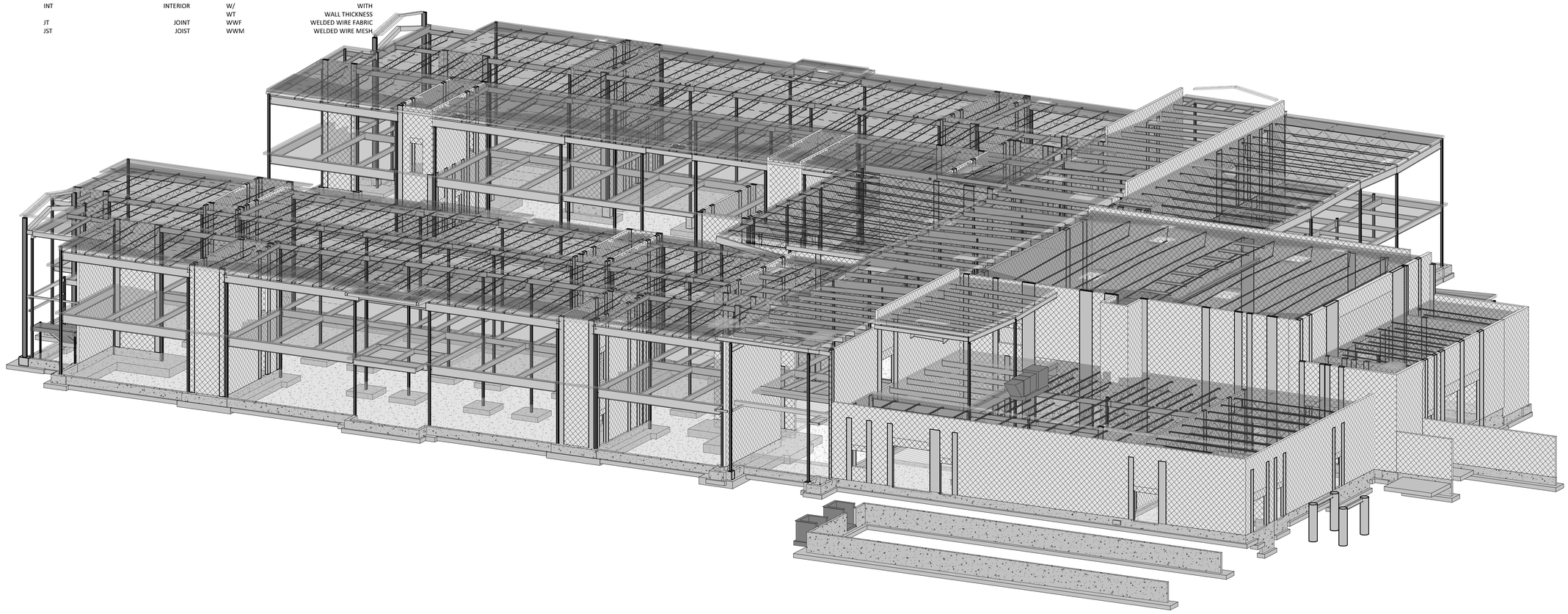
SECTION MARK
SHEET NUMBER
FOOTING DESIGNATION
TOP OF FOOTING ELEVATION S601
FCx.x — INDICATES CONTINUOUS FOOTING. SEE SCHEDULE ON SHEET S601
FSx.x — INDICATES SPOT FOOTING. SEE SCHEDULE ON SHEET S601
FTSx.x — INDICATES THICKENED SLAB FOOTING. SEE SCHEDULE ON SHEET S601
C.J. — INDICATES CONTROL / CONSTRUCTION JOINT, SEE DETAIL(S) 5/S501 AND 6/S501
CP-x — INDICATES CONCRETE PIER. SEE SCHEDULE ON SHEET S601
S — S — INDICATES FOOTING STEP, SEE DETAIL 3/S501
MCJ — INDICATES MASONRY CONTROL JOINT, SEE DETAIL 11/S501
ML-x — INDICATES MASONRY LINTEL TYPE. SEE SCHEDULE ON SHEET S603
MP-x — INDICATES MASONRY PIER TYPE. SEE SCHEDULE ON SHEET S603

INDICATES CONCRETE WALL. DASHED WALLS STOP AT DECK
INDICATES MASONRY WALL. DASHED WALLS STOP AT DECK
DEPRESS FOUNDATION WALL AND POUR SLAB OVER. SEE DETAIL 1/S502
INDICATES STRUCTURAL WALL ABOVE.
CWx — INDICATES CONCRETE FOUNDATION WALL TYPE. SEE SCHEDULE ON SHEET S601
CWv=MWx — INDICATES MASONRY WALL (AND TYPE) OVER CONCRETE WALL (AND TYPE). SEE SCHEDULES ON SHEET(S) S601 AND S603
MWx — INDICATES MASONRY WALL TYPE. SEE SCHEDULE ON SHEET S603
INDICATES CONCRETE OVER METAL FLOOR DECK. SEE GENERAL STRUCTURAL NOTES ON SHEET(S) S001 AND S002
INDICATES METAL ROOF DECK. SEE GENERAL STRUCTURAL NOTES ON SHEET(S) S002
SC-x — INDICATES STEEL COLUMN. SEE SCHEDULE ON SHEET S602
(HSS) — INDICATES HSS5x5x3/16 BLOCKING, SEE DETAILS

W_x_ (x) c/x" — INDICATES COMPOSITE STEEL BEAM, SEE GENERAL STRUCTURAL NOTES
T=Cx — INDICATES ADDITIONAL TOP CHORD ALLOWABLE LOAD. DUE TO SEISMIC, NO 1/3 INCREASE ALLOWED
INDICATES JOIST TOP CHORD TIES. SEE DETAIL 11/S524
W# — INDICATES FIELD WELDING REQUIRED AT SHEAR TAB CONNECTION. ARROWS INDICATE DIRECTION OF CONNECTION, SEE SCHEDULES ON SHEET(S) 2/S602
INDICATES MOMENT CONNECTION, SEE DETAILS
INDICATES KICKER, SEE DETAIL
INDICATES FLOOR OFFSET, SEE DETAILS
R.D. — INDICATES ROOF DRAIN, SEE DETAIL 2/S521
RTU — INDICATES ROOF MECHANICAL UNIT AND WEIGHT OF UNIT
[-x] — INDICATES ELEVATION BELOW DECK BEARING IN INCHES
INDICATES DROP-IN STEEL BEAM CONNECTION, SEE DETAIL 18/S521
(SRE) — INDICATES SEISMIC RESISTING ELEMENT, SEE ELEVATIONS AND DETAILS AND FOLLOW ADDITIONAL SPECIAL INSPECTIONS.

STRUCTURAL SHEET LIST

Sheet Number	Sheet Name
S001	GENERAL STRUCTURAL NOTES
S002	GENERAL STRUCTURAL NOTES
S003	SPECIAL INSPECTIONS
S004	SPECIAL INSPECTIONS
S010	LEGENDS AND ABBREVIATIONS
S101	FOOTING AND FOUNDATION PLAN - OVERALL
S101.1	FOOTING AND FOUNDATION PLAN - AREA 11
S101.2	FOOTING AND FOUNDATION PLAN - AREA 12
S101.3	FOOTING AND FOUNDATION PLAN - AREA 13
S101.4	FOOTING AND FOUNDATION PLAN - AREA 14
S111	LEVEL 2 FRAMING PLAN - OVERALL
S111.1	LEVEL 2 FRAMING PLAN - AREA 21
S111.2	LEVEL 2 FRAMING PLAN - AREA 22
S111.3	LEVEL 2 FRAMING PLAN - AREA 23
S111.4	LEVEL 2 FRAMING PLAN - AREA 24
S121	ROOF FRAMING PLAN - OVERALL
S121.1	ROOF FRAMING PLAN - AREA 31
S121.2	ROOF FRAMING PLAN - AREA 32
S121.3	ROOF FRAMING PLAN - AREA 33
S121.4	ROOF FRAMING PLAN - AREA 34
S122	OVERALL DECK PLAN
S201	METAL STUD SKIN DETAILS
S401	STAIR DETAILS
S402	STAIR ENLARGED PLANS
S501	DETAILS
S502	DETAILS
S503	DETAILS
S504	DETAILS
S511	DETAILS
S512	DETAILS
S513	DETAILS
S521	DETAILS
S522	DETAILS
S523	DETAILS
S524	DETAILS
S601	SCHEDULES
S602	SCHEDULES
S603	SCHEDULES



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REV	DATE	DESCRIPTION
1	08-25-2023	ADDENDUM 1
3	10-5-2023	ASI 01

OSD HILLCREST ELEMENTARY REBUILD

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LEGENDS AND ABBREVIATIONS

S010

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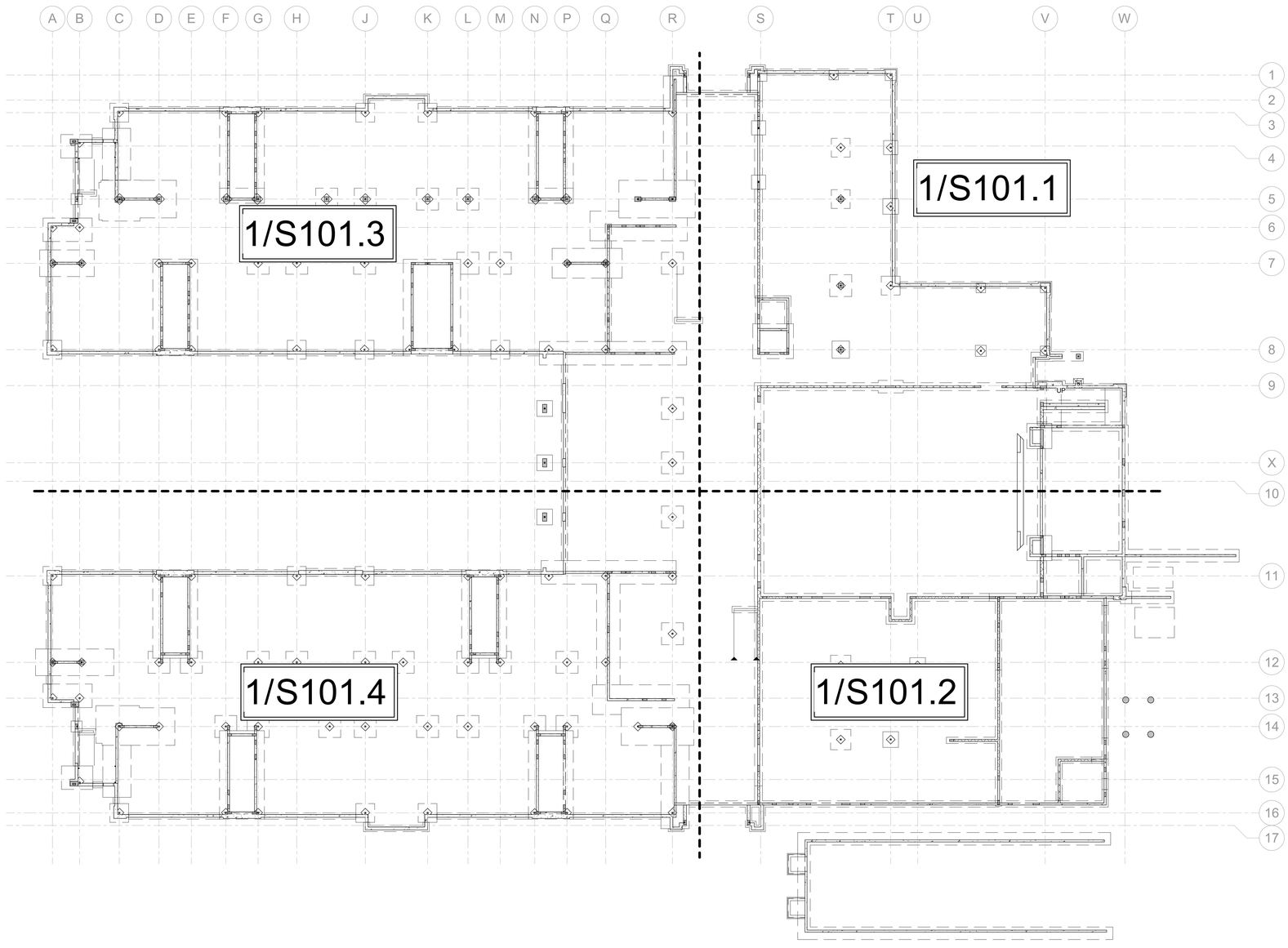
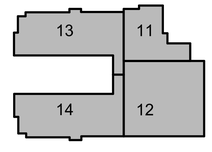


1 FOOTING AND FOUNDATION PLAN - OVERALL

1/16" = 1'-0" 0" 8'-0" 16'-0" 32'-0"

KEY PLAN - MAIN LEVEL



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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

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FOOTING AND FOUNDATION PLAN - OVERALL

S101

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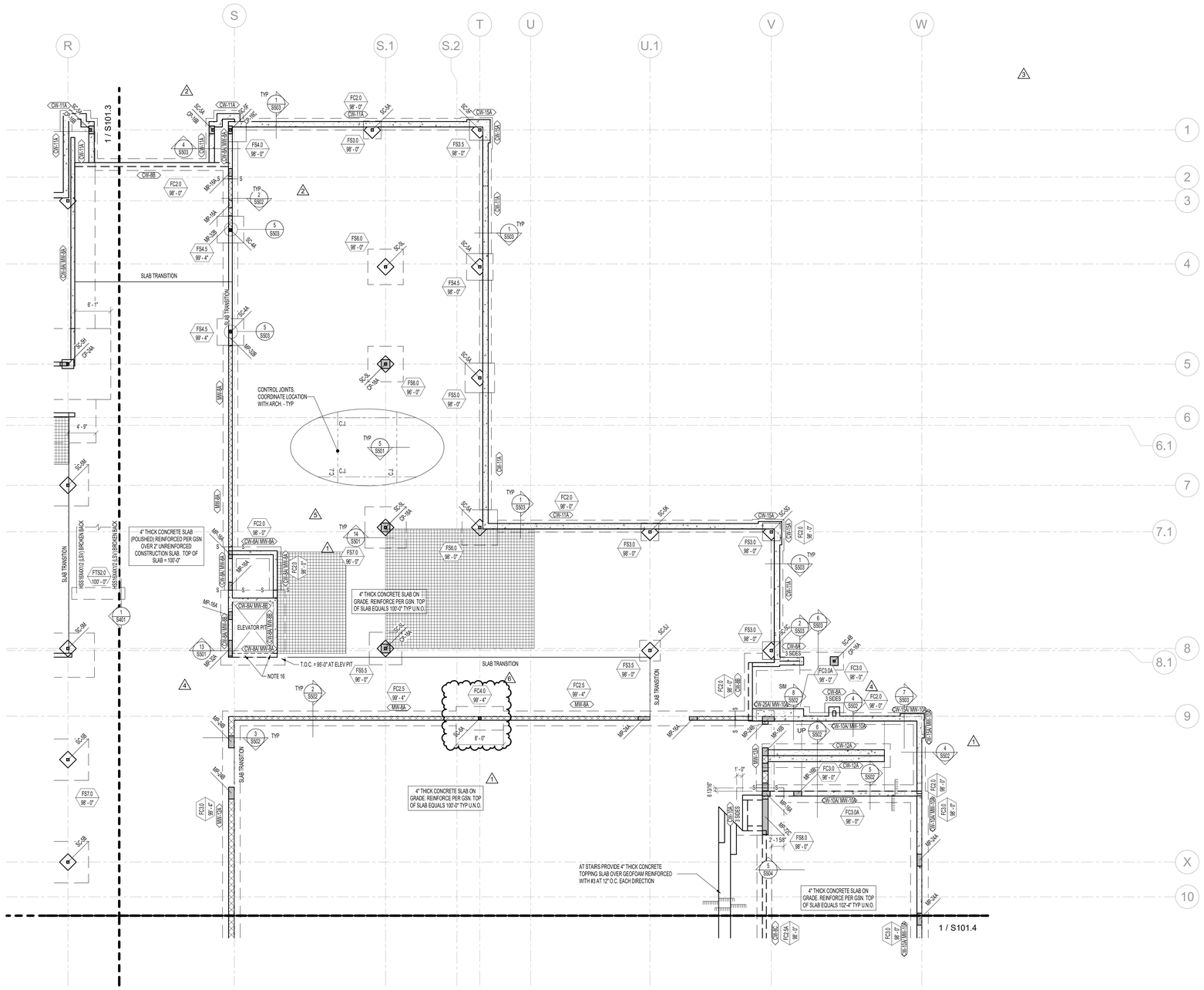


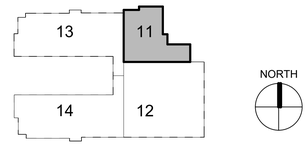
1 AREA 11 FOOTING AND FOUNDATION PLAN

1/8" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

FOOTING AND FOUNDATION PLAN NOTES

1. COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.
4. SEE "EARTHWORK" NOTES ON SHEET S001 AND DETAIL 16/S501 FOR MINIMUM FILL REQUIRED BENEATH FOOTINGS.
5. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
6. SEE DETAILS 1/S501 AND 2/S501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND PERPENDICULAR TO FOOTINGS.
7. SEE DETAIL 5/S501 AND 6/S501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.
8. SEE DETAIL 7/S501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS.
9. SEE DETAIL 8/S501 FOR ADDITIONAL REINFORCING AROUND MISCELLANEOUS OPENINGS IN CONCRETE WALLS.
10. SEE DETAIL 9/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
11. SEE DETAIL 10/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS.
12. SEE DETAIL 11/S501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.
13. SEE DETAIL 12/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
14. SEE DETAIL 15/S501 FOR ANCHORAGE OF HOUSEKEEPING PADS.
15. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.
16. AT ELEVATOR OPENING, INSTALL FRONT SECTIONS OF WALL AFTER ELEVATOR CAB IS INSTALLED. DRILL AND EPOXY ALL REINFORCING INTO ADJACENT CMU PER SCHEDULE 5/S601
17. SEE 6/S601 FOR SITE RETAINING WALL CONSTRUCTION. REFER TO ARCH/CIVIL FOR SITE WALL LAYOUT.

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION
1	08-25-2023	ADDENDUM 1
2	09-08-2023	FOOTING REVISION
3	10-5-2023	ASI 01
4	11-15-2023	CD Set
5	11-16-2023	Addendum 01
6	12-7-2023	ASI 03

OSD HILLCREST ELEMENTARY REBUILD

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FOOTING AND FOUNDATION PLAN - AREA 11

S101.1

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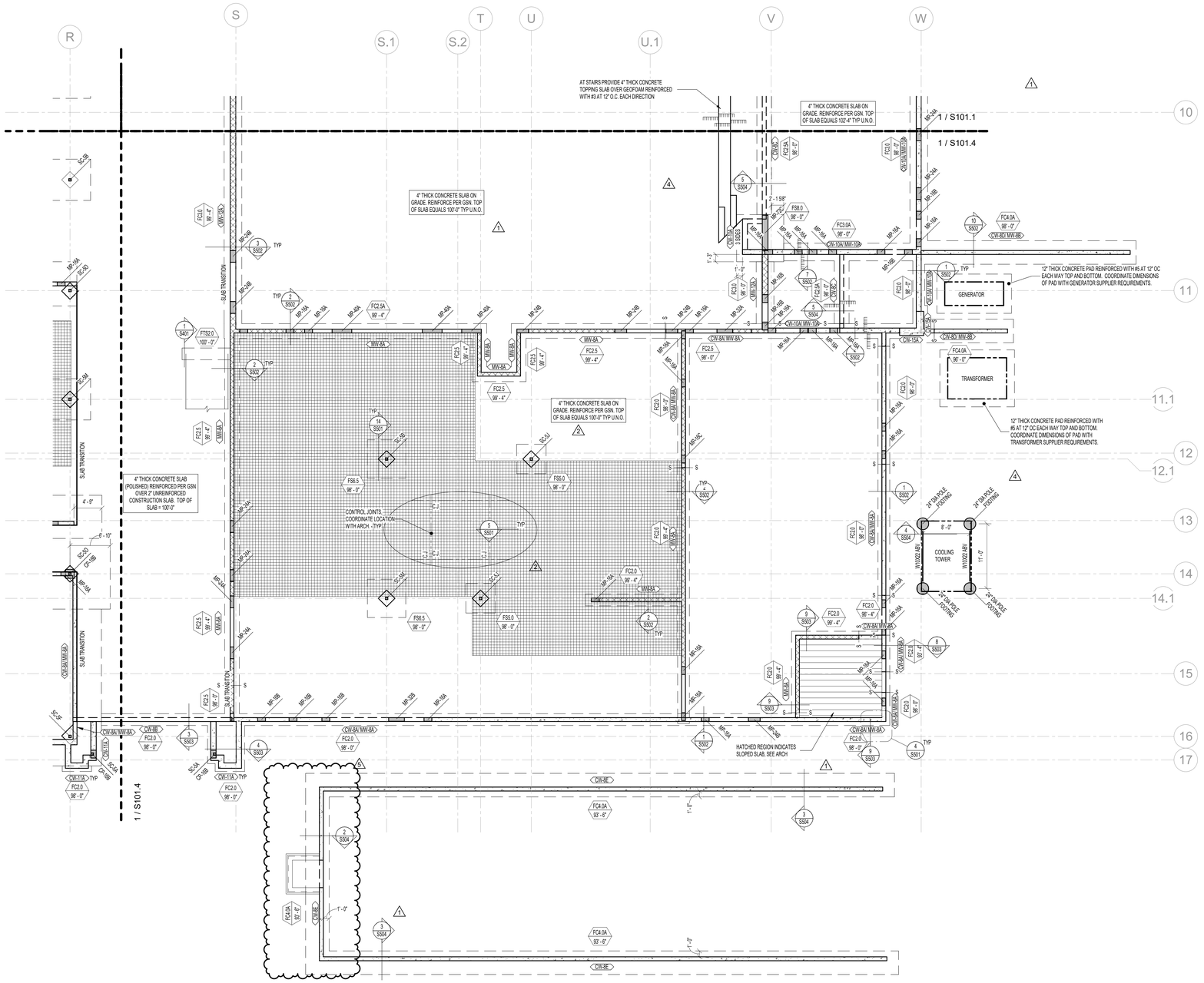

1 AREA 12 FOOTING AND FOUNDATION PLAN

1/8" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

FOOTING AND FOUNDATION PLAN NOTES

1. COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.
4. SEE "EARTHWORK" NOTES ON SHEET S001 AND DETAIL 16/S501 FOR MINIMUM FILL REQUIRED BENEATH FOOTINGS.
5. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
6. SEE DETAILS 1/S501 AND 2/S501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND PERPENDICULAR TO FOOTINGS.
7. SEE DETAIL 5/S501 AND 6/S501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.
8. SEE DETAIL 7/S501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS.
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10. SEE DETAIL 9/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
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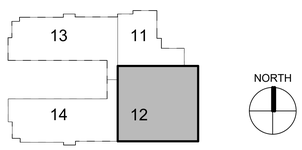
13. SEE DETAIL 12/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
14. SEE DETAIL 15/S501 FOR ANCHORAGE OF HOUSEKEEPING PADS.
15. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.
16. AT ELEVATOR OPENING, INSTALL FRONT SECTIONS OF WALL AFTER ELEVATOR CAB IS INSTALLED. DRILL AND EPOXY ALL REINFORCING INTO ADJACENT CMU PER SCHEDULE S/S601
17. SEE 6/S601 FOR SITE RETAINING WALL CONSTRUCTION. REFER TO ARCH/CIVIL FOR SITE WALL LAYOUT.

KEY PLAN - MAIN LEVEL



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4	11-15-2023	CD Set
5	11-16-2023	Addendum 01

OSD HILLCREST ELEMENTARY REBUILD

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FOOTING AND FOUNDATION PLAN - AREA 12

S101.2

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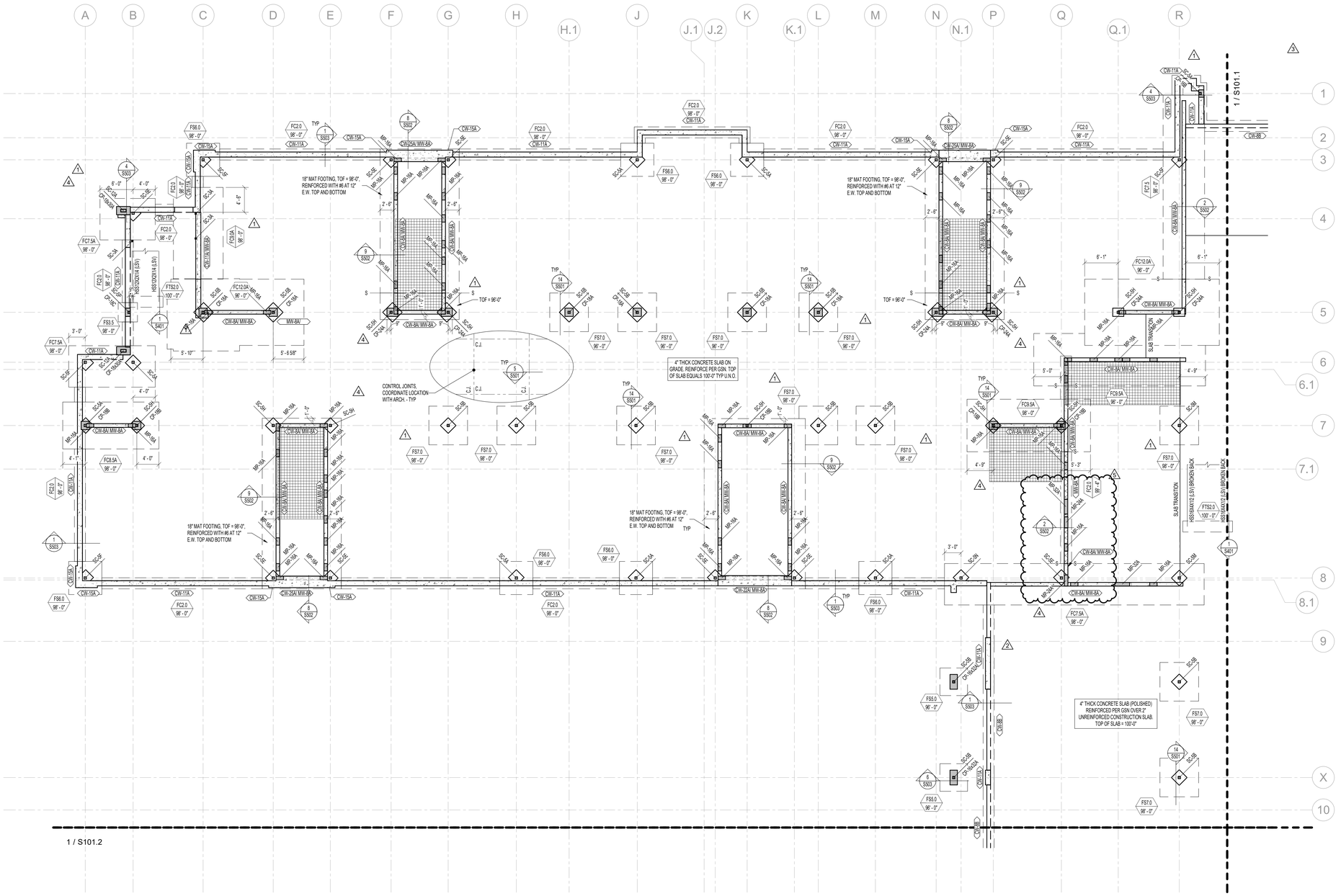

1 AREA 13 FOOTING AND FOUNDATION PLAN

1/8" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

FOOTING AND FOUNDATION PLAN NOTES

1. COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.
4. SEE "EARTHWORK" NOTES ON SHEET S001 AND DETAIL 16/S501 FOR MINIMUM FILL REQUIRED BENEATH FOOTINGS.
5. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
6. SEE DETAILS 1/S501 AND 2/S501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND PERPENDICULAR TO FOOTINGS.
7. SEE DETAIL 5/S501 AND 6/S501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.
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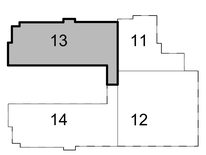
16. AT ELEVATOR OPENING, INSTALL FRONT SECTIONS OF WALL AFTER ELEVATOR CAB IS INSTALLED. DRILL AND EPOXY ALL REINFORCING INTO ADJACENT CMU PER SCHEDULE S/S601.
17. SEE 6/S601 FOR SITE RETAINING WALL CONSTRUCTION. REFER TO ARCH/CIVIL FOR SITE WALL LAYOUT.

KEY PLAN - MAIN LEVEL



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DATE: (Issue Date)

PROFESSIONAL STRUCTURAL ENGINEER
No. 9072017-2201
TRAVIS ROSS BRACKUS
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11-16-23

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REV	DATE	DESCRIPTION
1	08-25-2023	ADDENDUM 1
2	09-08-2023	FOOTING REVISION
3	10-5-2023	ASI 01
4	11-15-2023	CD Set
5	11-16-2023	Addendum 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

FOOTING AND FOUNDATION PLAN - AREA 13

S101.3

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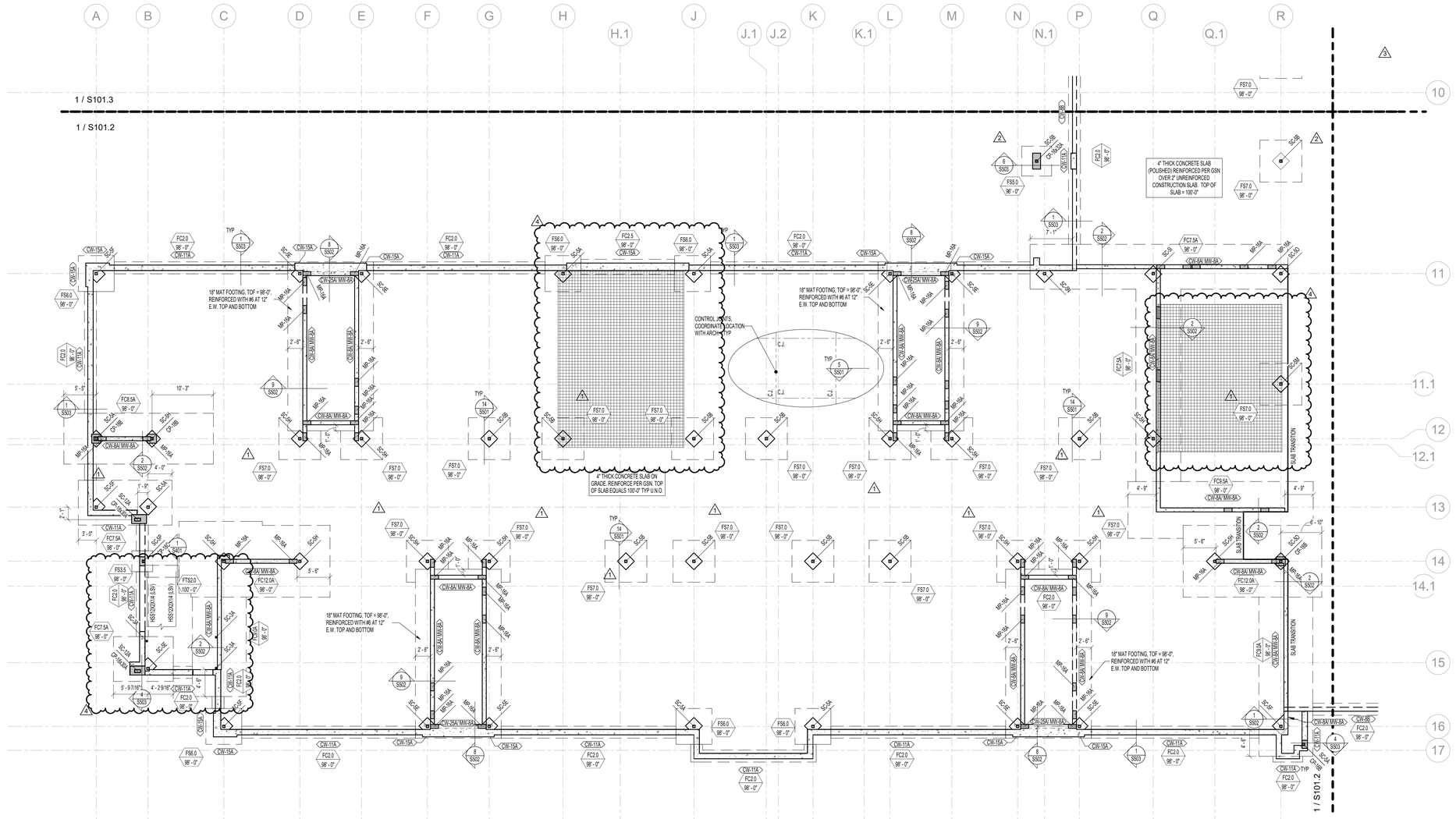

1 AREA 14 FOOTING AND FOUNDATION PLAN

1/8" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

FOOTING AND FOUNDATION PLAN NOTES

1. COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.
4. SEE "EARTHWORK" NOTES ON SHEET S001 AND DETAIL 16/S501 FOR MINIMUM FILL REQUIRED BENEATH FOOTINGS.
5. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
6. SEE DETAILS 1/S501 AND 2/S501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND PERPENDICULAR TO FOOTINGS.
7. SEE DETAIL 5/S501 AND 6/S501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.
8. SEE DETAIL 7/S501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS.
9. SEE DETAIL 8/S501 FOR ADDITIONAL REINFORCING AROUND MISCELLANEOUS OPENINGS IN CONCRETE WALLS.
10. SEE DETAIL 9/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
11. SEE DETAIL 10/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS.
12. SEE DETAIL 11/S501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.
13. SEE DETAIL 12/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
14. SEE DETAIL 15/S501 FOR ANCHORAGE OF HOUSEKEEPING PADS.
15. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.
16. AT ELEVATOR OPENING, INSTALL FRONT SECTIONS OF WALL AFTER ELEVATOR CAB IS INSTALLED. DRILL AND EPOXY ALL REINFORCING INTO ADJACENT CMU PER SCHEDULE S/S601
17. SEE 6/S601 FOR SITE RETAINING WALL CONSTRUCTION. REFER TO ARCH/CIVIL FOR SITE WALL LAYOUT.

KEY PLAN - MAIN LEVEL

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REV	DATE	DESCRIPTION
1	08-25-2023	ADDENDUM 1
2	09-08-2023	FOOTING REVISION
3	10-5-2023	ASI 01
4	11-1-2023	CD Set

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FOOTING AND FOUNDATION PLAN - AREA 14

S101.4

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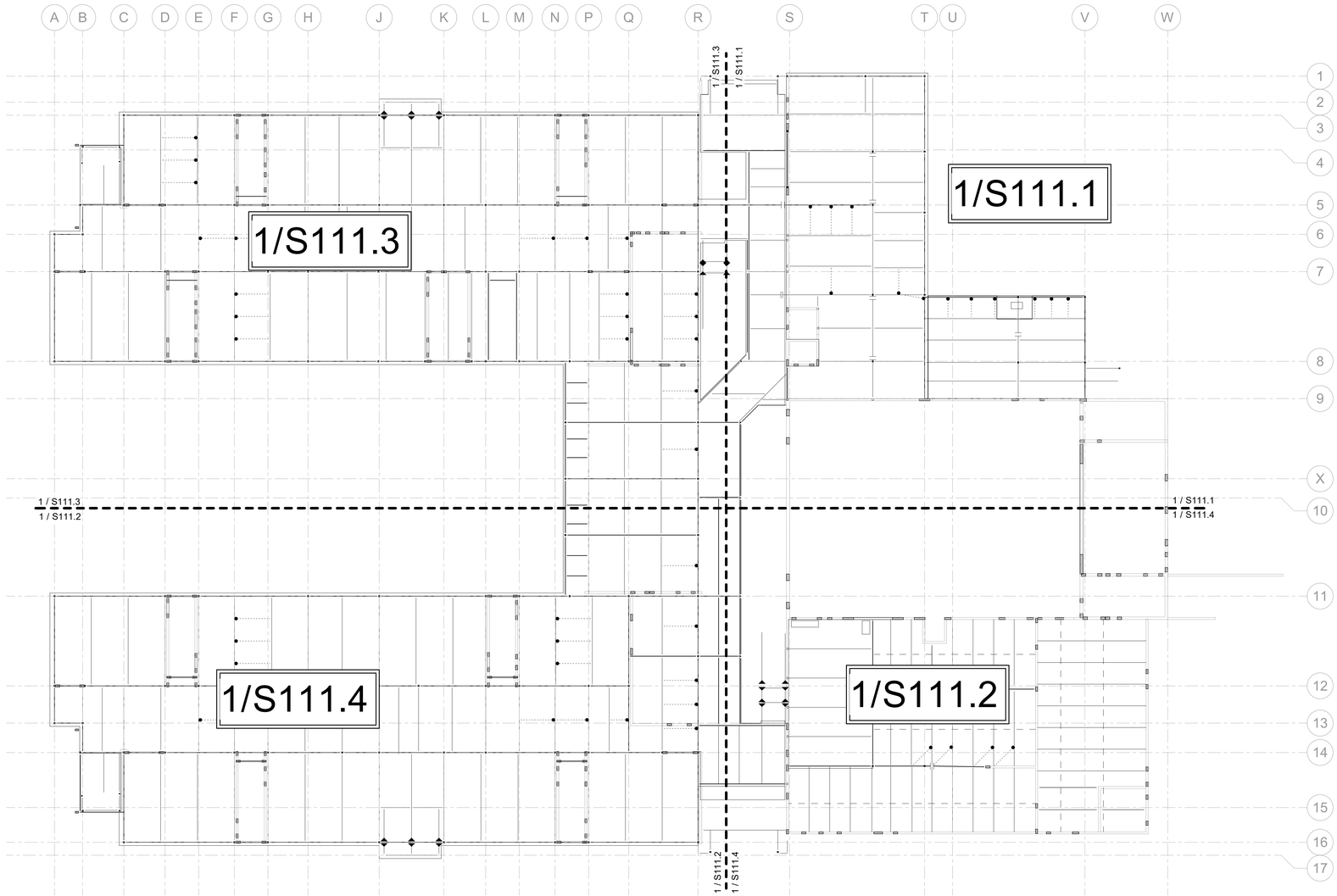
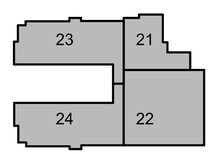


1 LEVEL 02 FRAMING PLAN - OVERALL

1/16" = 1'-0" 0" 8'-0" 16'-0" 32'-0"

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION

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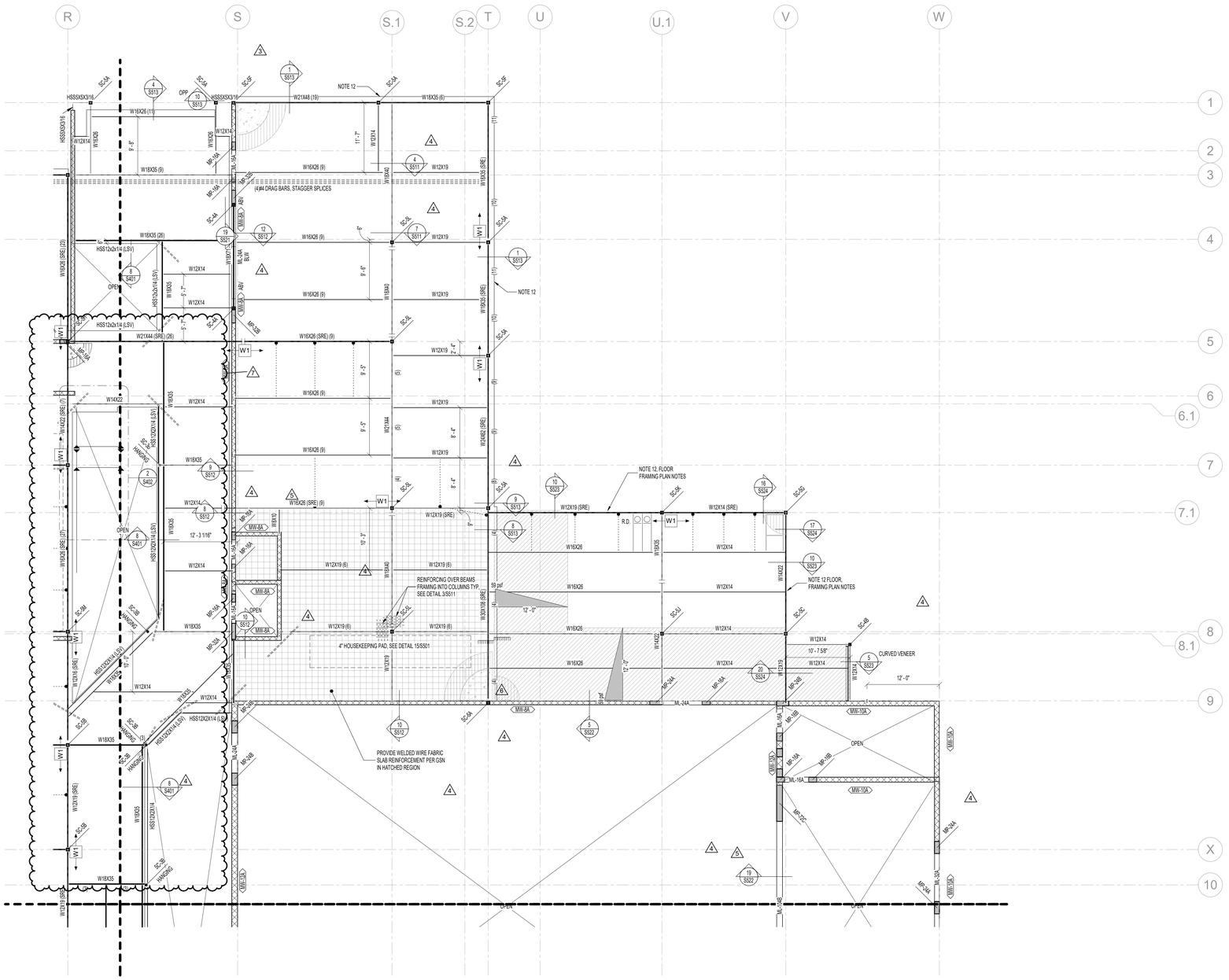
LEVEL 2 FRAMING PLAN - OVERALL

S111

11/8/2023 5:06:13 PM


R
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7
7.1
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8.1
9
X
10
NOTE 12
NOTE 12, FLOOR FRAMING PLAN NOTES
NOTE 12 FLOOR, FRAMING PLAN NOTES
REINFORCING OVER BEAMS FRAMING INTO COLUMNS TYP. SEE DETAIL 3/S511
4" HOUSEKEEPING PAD. SEE DETAIL 15/S501
PROVIDE WELDED WIRE FABRIC SLAB REINFORCEMENT PER GSN IN HATCHED REGION
(4)#4 DRAG BARS, STAGGER SPLICES
CURVED VENEER
OPEN
R.D.
W12X19 (SRE)
W16X26
W12X14
W18X35
W16X26 (9)
W12X19
W16X26 (SRE) (9)
W21X44 (SRE) (26)
W14X22
W12X14 (SRE)
W16X26 (SRE) (8)
W12X19 (6)
W16X26 (11)
W21X48 (19)
W18X35 (6)
W18X35 (9)
W18X35 (26)
W12X14 (SRE)
W12X19 (SRE)
HSS12x2x14 (LSV)
HSS12x2x14 (LSV)
HSS12x2x14 (LSV)
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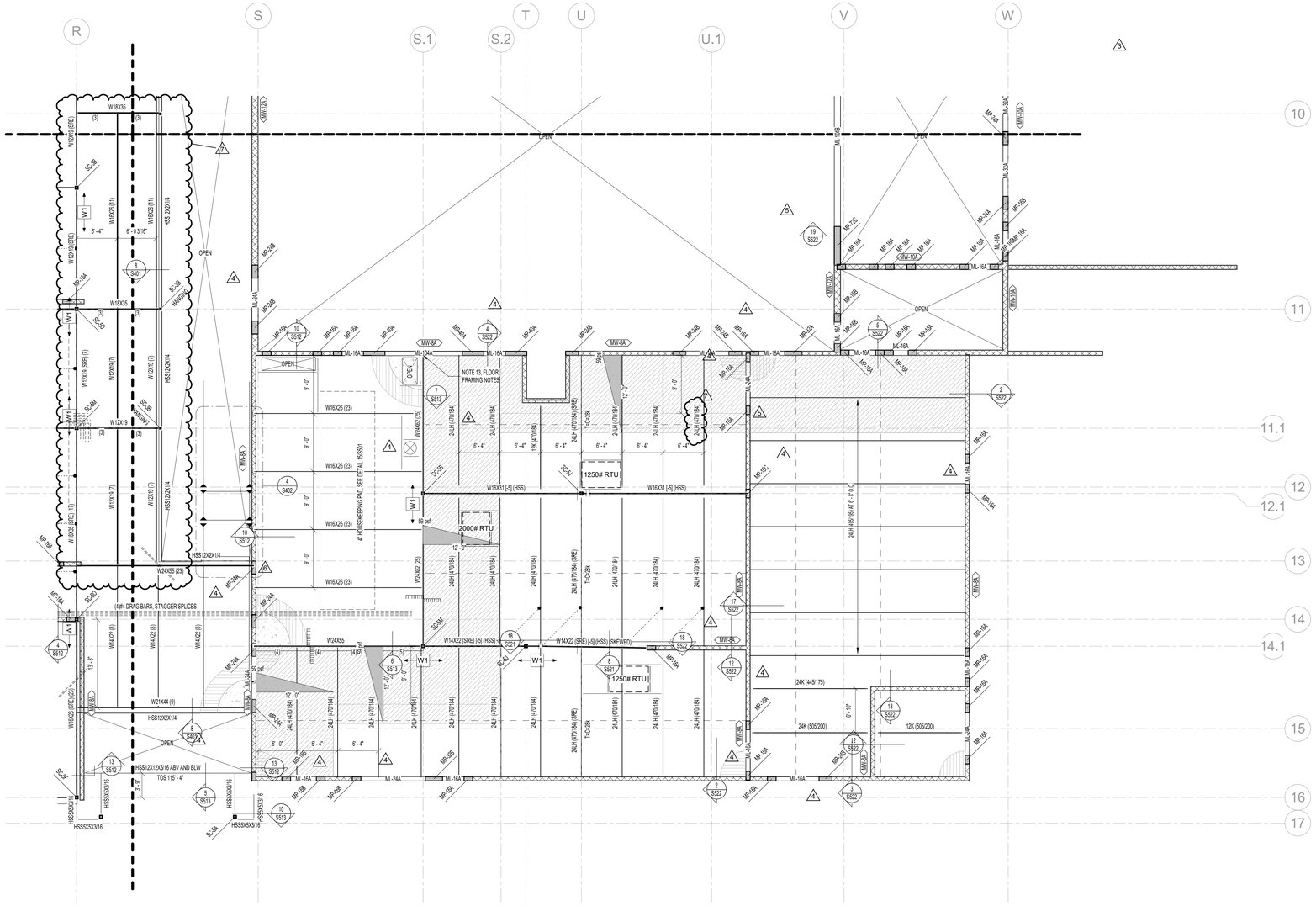
HSS12X2X



1 AREA 22 LEVEL 02 FRAMING PLAN

1/8" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

ROOF FRAMING PLAN NOTES

1. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. ALL JOISTS SHALL HAVE 5" DEEP BEARING ENDS (UNO).
3. ALL ROOF OPENINGS GREATER THAN, OR EQUAL TO, 12" x 12" SHALL BE FRAMED AS INDICATED IN DETAILS 1/SS21 AND 2/SS21. FOR OPENINGS WHICH CUT LESS THAN TWO DECK FLUTES, SEE DETAIL 3/SS21.
4. SEE DETAIL 5/SS11 FOR STEEL BRACE DETAIL CONNECTIONS AND LOCATIONS.
5. SEE DETAIL 4/SS21 WHEN CONCENTRATED LOADS ARE LOCATED MORE THAN 6" FROM JOIST OR JOIST GIRDER PANEL POINT.
6. SEE DETAIL S5S21 WHEN MECHANICAL UNITS ARE HUNG BELOW JOISTS.
7. VERIFY SIZE, WEIGHT, AND LOCATION OF ALL ROOF TOP MECHANICAL UNITS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. SEE DETAIL 1/ASS24 FOR STEEL FRAMES AT ALL ROOF TOP EQUIPMENT. COORDINATE OPENINGS WITH MECHANICAL, ELECTRICAL, AND GENERAL CONTRACTORS.
8. JOIST SUPPLIER SHALL DESIGN ALL ROOF JOIST BEARING ENDS AT CMU WALLS TO TRANSFER 7673 lbs (ALLOWABLE) AXIAL LOAD THROUGH JOIST BEARING ENDS.
9. OPEN WEB STEEL JOISTS SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE MECHANICAL AND LATERAL LOADS SHOWN ON THE ROOF FRAMING PLANS IN ADDITION TO THE UNIFORM AND POINT LOADS SHOWN.
10. JOIST BRIDGING SHOWN ON PLANS IS FOR REPRESENTATION ONLY. ACTUAL SIZE, QUANTITY, AND LOCATION WILL BE DETERMINED BY THE JOIST SUPPLIER PER SJI REQUIREMENTS. ALL BRIDGING AND BRIDGING ANCHORS NEED TO BE IN PLACE BEFORE APPLYING ANY LOADS. WHERE SKYLIGHT OR MECHANICAL UNITS/DUCTS INTERRUPT HORIZONTAL BRIDGING, PROVIDE CROSS BRIDGING AT JOIST SPACES ON EACH SIDE OF THE OPENING. WHERE DIAGONAL BRIDGING CONFLICTS WITH MECHANICAL DUCTS, REMOVE DIAGONAL BRIDGING AND REPLACE WITH HORIZONTAL BRIDGING AFTER ROOF DECK IS IN PLACE.
11. JOIST DESIGNER SHALL DESIGN JOISTS AND SUPPLY ADDITIONAL BRIDGING AS REQUIRED FOR UPLIFT DUE TO WIND. ASSUME:
    - 0.6DL = 8psf
    - 0.6WL = 12psf (UPLIFT)
    - 5psf NET UPLIFT (ASD)
    - NO 1/3 STRESS INCREASE ALLOWED.
12. SEE DETAIL 9/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
13. SEE DETAIL 10/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS.
14. SEE DETAIL 11/S501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.
15. SEE DETAIL 12/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
16. SEE DETAIL S/S603 FOR BRACING OF NON-BEARING MASONRY WALLS.
17. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO ALL STEEL COLUMNS.
18. PROVIDE CONTINUOUS VENEER SHELF ANGLE AT HEAD OF LEVEL 2 WINDOWS. SEE DETAILS.
19. AT JOISTS SUPPORTING FOLDING PARTITION, JOIST DESIGNER SHALL LIMIT LIVE LOAD (1.0LL + 1.0SL) TO L/1200 MAXIMUM.

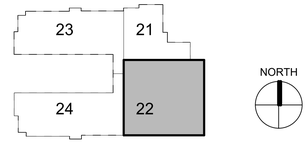
FLOOR FRAMING DESIGN LOADS

FLOOR LOADS	JOIST	GIRDER
CONCRETE COVER	51 psf	51 psf
STEEL DECK	2.0 psf	2.0 psf
STEEL JOISTS	4.0 psf	4.0 psf
STEEL GIRDERS	0 psf	2.0 psf
CEILING	5.0 psf	3.0 psf
MECHANICAL / COLLATERAL	3.0 psf	3.0 psf
LIVE LOAD	80 psf	80 psf
PARTITIONS	20 psf	20 psf
TOTAL LOAD	165 psf	165 psf

FLOOR FRAMING PLAN NOTES

1. VERIFY ALL FLOOR OPENINGS FOR MECHANICAL SHAFTS, STAIRS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE DETAILS 1/SS11 AND 2/SS11 FOR FRAMING AROUND ALL OPENINGS.
3. SEE DETAIL 5/SS11 FOR STEEL BRACE DETAIL CONNECTIONS AND LOCATIONS.
4. COORDINATE SIZE AND LOCATION OF ALL MECHANICAL OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
5. SEE DETAIL 9/SS11 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
6. SEE DETAIL 10/SS11 FOR CONDITION AT RECESSES IN MASONRY WALLS.
7. SEE DETAIL 11/SS11 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.
8. SEE DETAIL 12/SS11 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
9. SEE DETAIL S/S603 FOR BRACING OF NON-BEARING MASONRY WALLS.
10. SEE DETAIL 15/SS11 AND FOR ANCHORAGE OF HOUSEKEEPING PADS.
11. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.
12. AT LEVEL 1 WINDOWS, PROVIDE VENEER LINTEL ANGLES OVER PERIMETER OPENINGS UNLESS INDICATED OTHERWISE. SEE SCHEDULE ON S602. PROVIDE MA-1 PER 10/S201.
13. WHERE NOTED, POCKET BEAM BEARING PLATE IN MASONRY LINTEL & PROVIDE (2) TIES PER LINTEL SCHEDULE ON BOTH SIDES OF BEARING PLATE.

KEY PLAN - UPPER LEVEL



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12/22/23

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REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01
4	11-15-2023	CD Set
5	11-16-2023	Addendum 01
6	12-7-2023	ASI 03
7	12-20-2023	PR 01

OSD HILLCREST ELEMENTARY REBUILD

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LEVEL 2 FRAMING PLAN - AREA 22

S111.2

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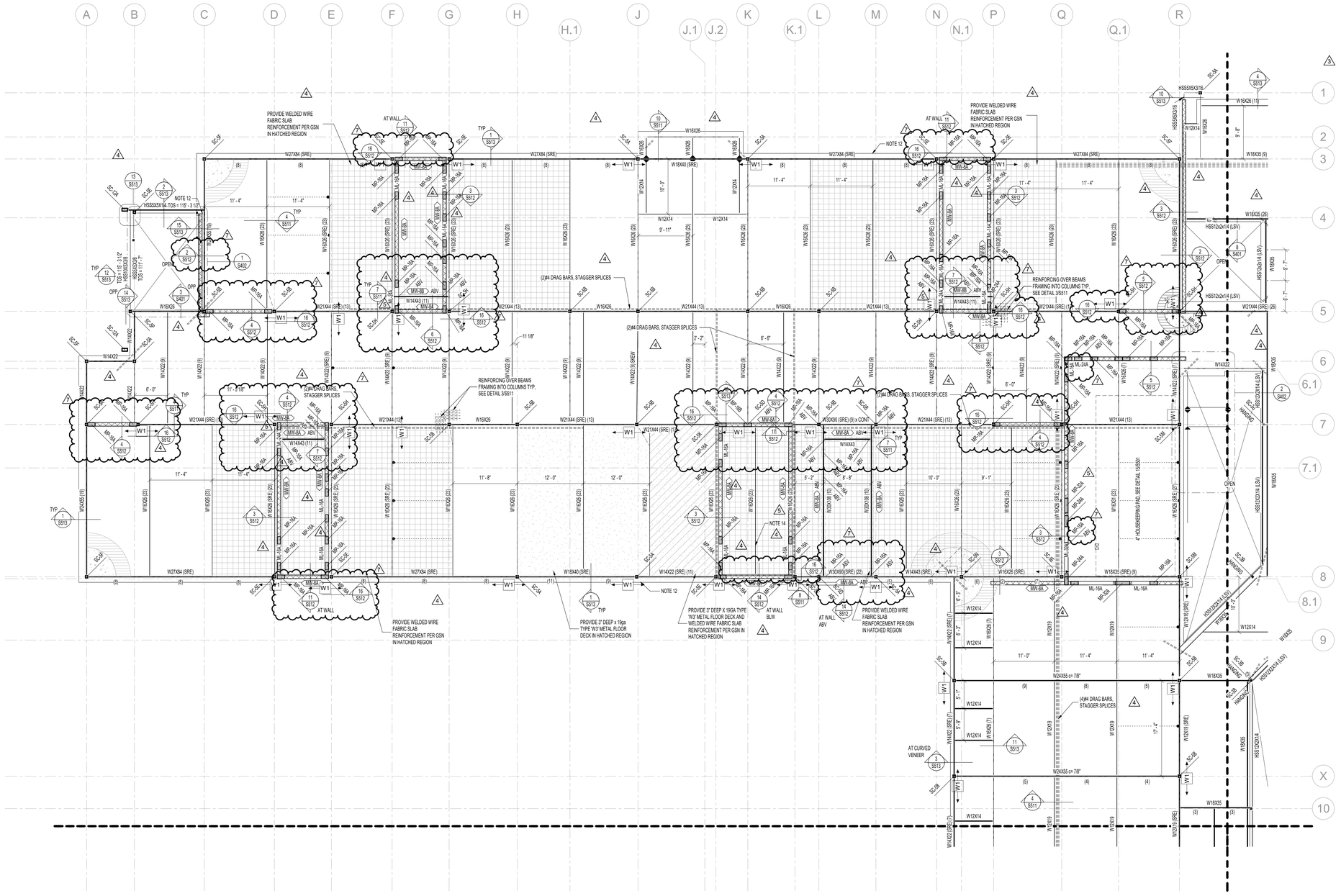


1 AREA 23 LEVEL 02 FRAMING PLAN

1/8" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

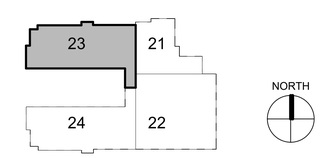
FLOOR FRAMING DESIGN LOADS

FLOOR LOADS	JOIST	GIRDER
CONCRETE COVER	51 psf	51 psf
STEEL DECK	2.0 psf	2.0 psf
STEEL JOISTS	4.0 psf	4.0 psf
STEEL GIRDERS	0 psf	2.0 psf
CEILING	5.0 psf	3.0 psf
MECHANICAL / COLLATERAL	3.0 psf	3.0 psf
LIVE LOAD	80 psf	80 psf
PARTITIONS	20 psf	20 psf
TOTAL LOAD	165 psf	165 psf

FLOOR FRAMING PLAN NOTES

1. VERIFY ALL FLOOR OPENINGS FOR MECHANICAL SHAFTS, STAIRS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE DETAILS 1/S511 AND 2/S511 FOR FRAMING AROUND ALL OPENINGS.
3. SEE DETAIL 5/S511 FOR STEEL BRACE DETAIL CONNECTIONS AND LOCATIONS.
4. COORDINATE SIZE AND LOCATION OF ALL MECHANICAL OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
5. SEE DETAIL 9/S501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
6. SEE DETAIL 10/S501 FOR CONDITION AT RECESSES IN MASONRY WALLS.
7. SEE DETAIL 11/S501 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.
8. SEE DETAIL 12/S501 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
9. SEE DETAIL 5/S603 FOR BRACING OF NON-BEARING MASONRY WALLS.
10. SEE DETAIL 15/S501 FOR ANCHORAGE OF HOUSEKEEPING PADS.
11. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.
12. AT LEVEL 1 WINDOWS, PROVIDE VENEER LINTEL ANGLES OVER PERIMETER OPENINGS UNLESS INDICATED OTHERWISE. SEE SCHEDULE ON S602. PROVIDE MH-1 PER 9/S201.
13. WHERE NOTED, POCKET BEAM BEARING PLATE IN MASONRY LINTEL & PROVIDE (2) TIES PER LINTEL SCHEDULE ON BOTH SIDES OF BEARING PLATE.
14. WHERE NOTED, PROVIDE SENSORY ROOM SWING PER 15/S512. SEE ARCHITECTURAL FOR EXACT LOCATION AND FURTHER DETAIL.

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01
4	11-15-2023	CD Set
5	11-16-2023	Addendum 01
6	12-7-2023	ASI 03
7	12-20-2023	PR 01

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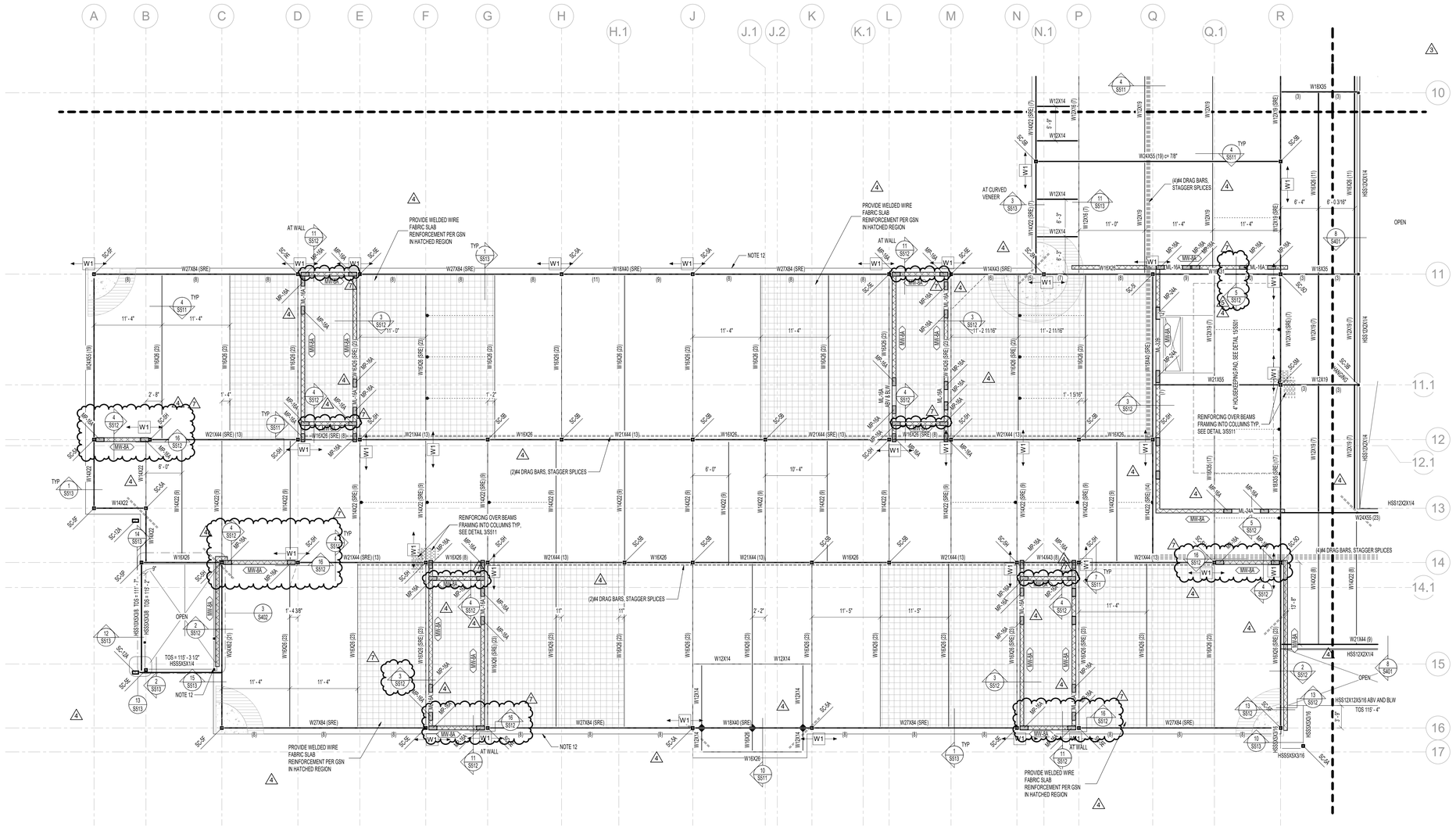
LEVEL 2 FRAMING PLAN - AREA 23

S111.3

12/22/2023 2:00:20 PM


PROVIDE WELDED WIRE FABRIC SLAB REINFORCEMENT PER GSN IN HATCHED REGION
AT WALL
NOTE 12
(2)#4 DRAG BARS, STAGGER SPLICES
REINFORCING OVER BEAMS FRAMING INTO COLUMNS TYP. SEE DETAIL 3/S511
AT CURVED VENEER
(4)#4 DRAG BARS, STAGGER SPLICES
4" HSS12X12X1/4 PAD, SEE DETAIL 3/S501
OPEN
TOS = 115' - 3 1/2" HSSSX5X1/4
HSS12X12X5/16 ABV AND BLW
TOS 115' - 4"
HSSSXSX3/8 TOS = 111' - 7"
HSSSXSX3/8 TOS = 115' - 2"
HSSSXSX3/16
HSSSXSX1/4
W27X84 (SRE)
W18X40 (SRE)
W14X43 (SRE)
W21X44 (SRE) (13)
W16X26
W16X26 (SRE) (8)
W18X35
W21X55
W24X55 (19) <= 7/8"
W24X55 (23)
W21X44 (9)
W12X14
W12X19
W12X19 (SRE)
W18X35 (3)
W18X50 (11)
W18X50 (SRE) (2)
W18X50 (SRE) (3)
W18X50 (SRE) (17)
W14X22
W14X22 (SRE) (8)
W14X22 (SRE) (14)
HSS12X2X1/4
HSS12X12X1/4
W1
MW-9A
MW-9B
MW-9C
MW-9D
ML-16A
ML-34A
MP-16A
MP-16B
MP-16C
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MP-16CX
MP-16CY
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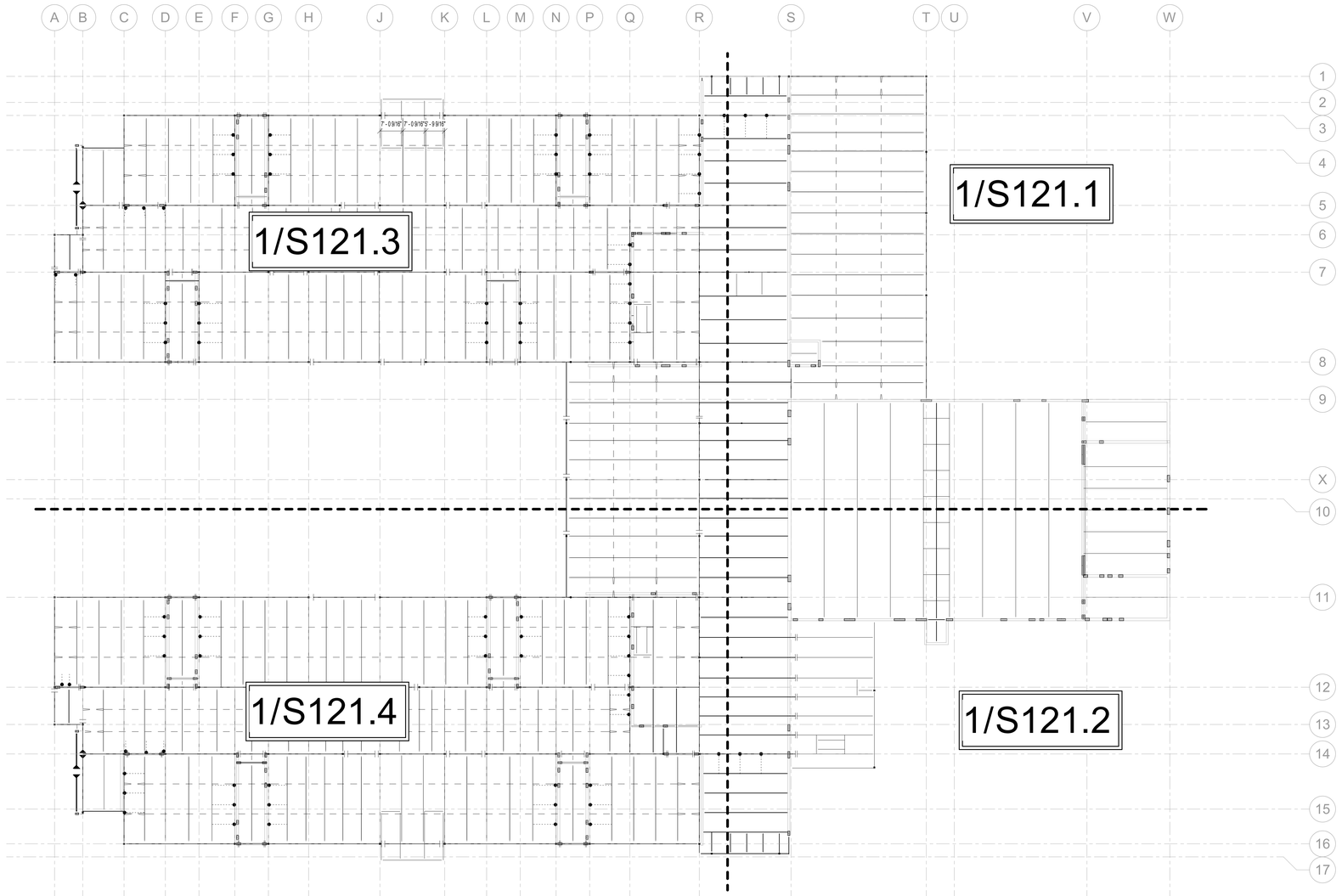
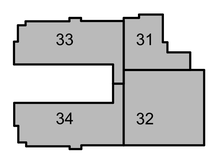


1 ROOF FRAMING PLAN - OVERALL

1/16" = 1'-0" 0" 8'-0" 16'-0" 32'-0"

KEY PLAN - ROOF



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STATE OF UTAH

11-8-23

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

REV	DATE	DESCRIPTION

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130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

ROOF FRAMING PLAN - OVERALL

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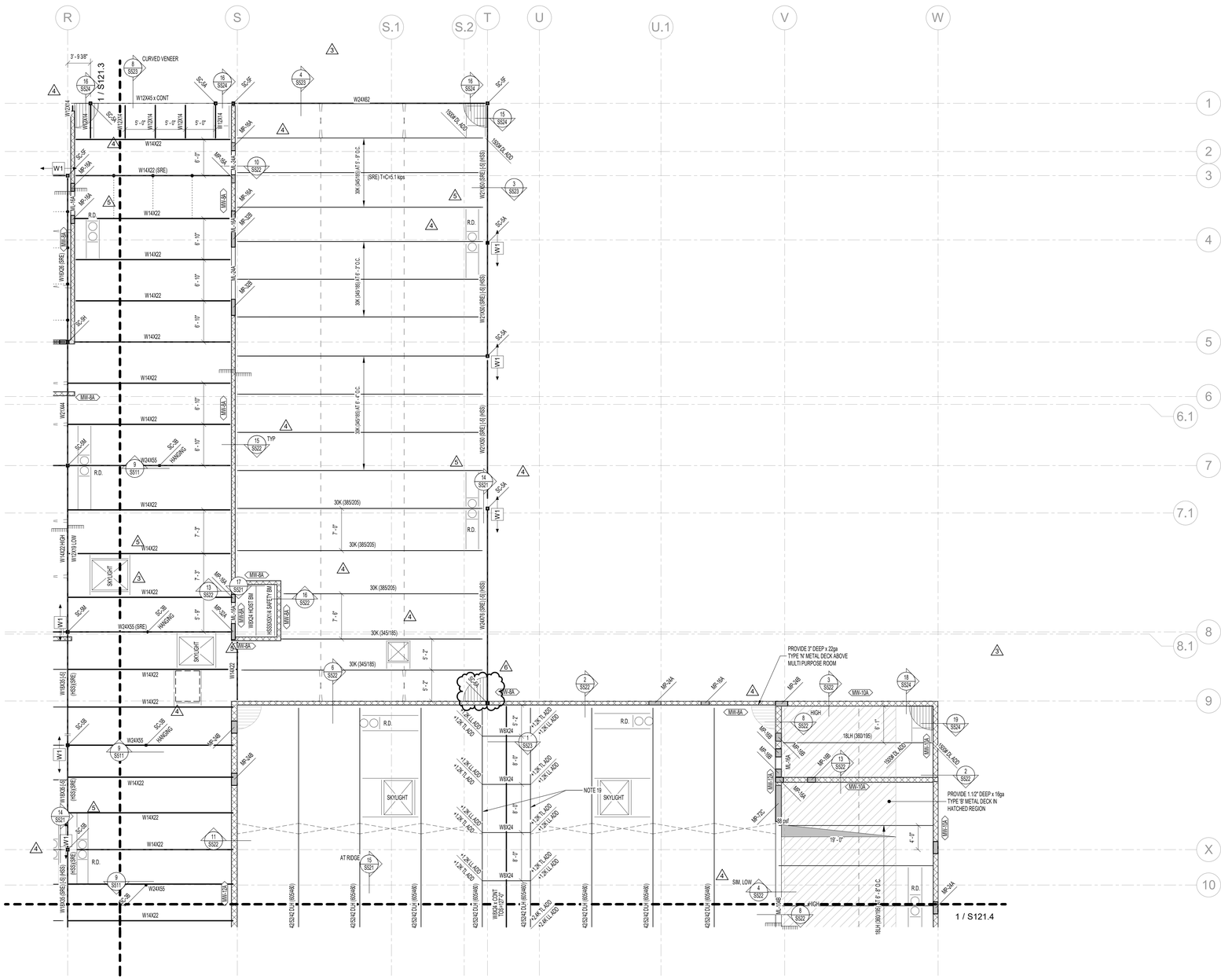
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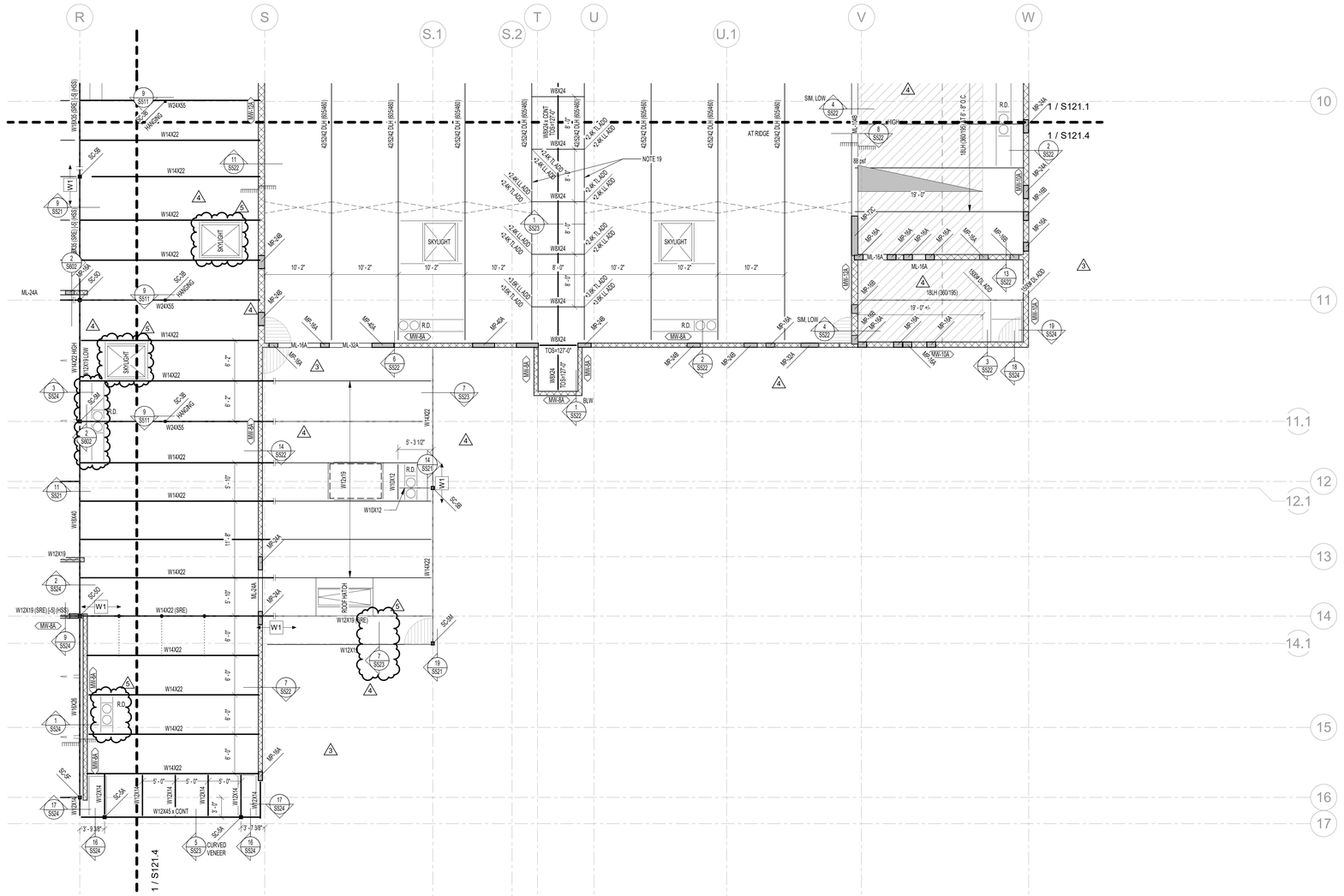
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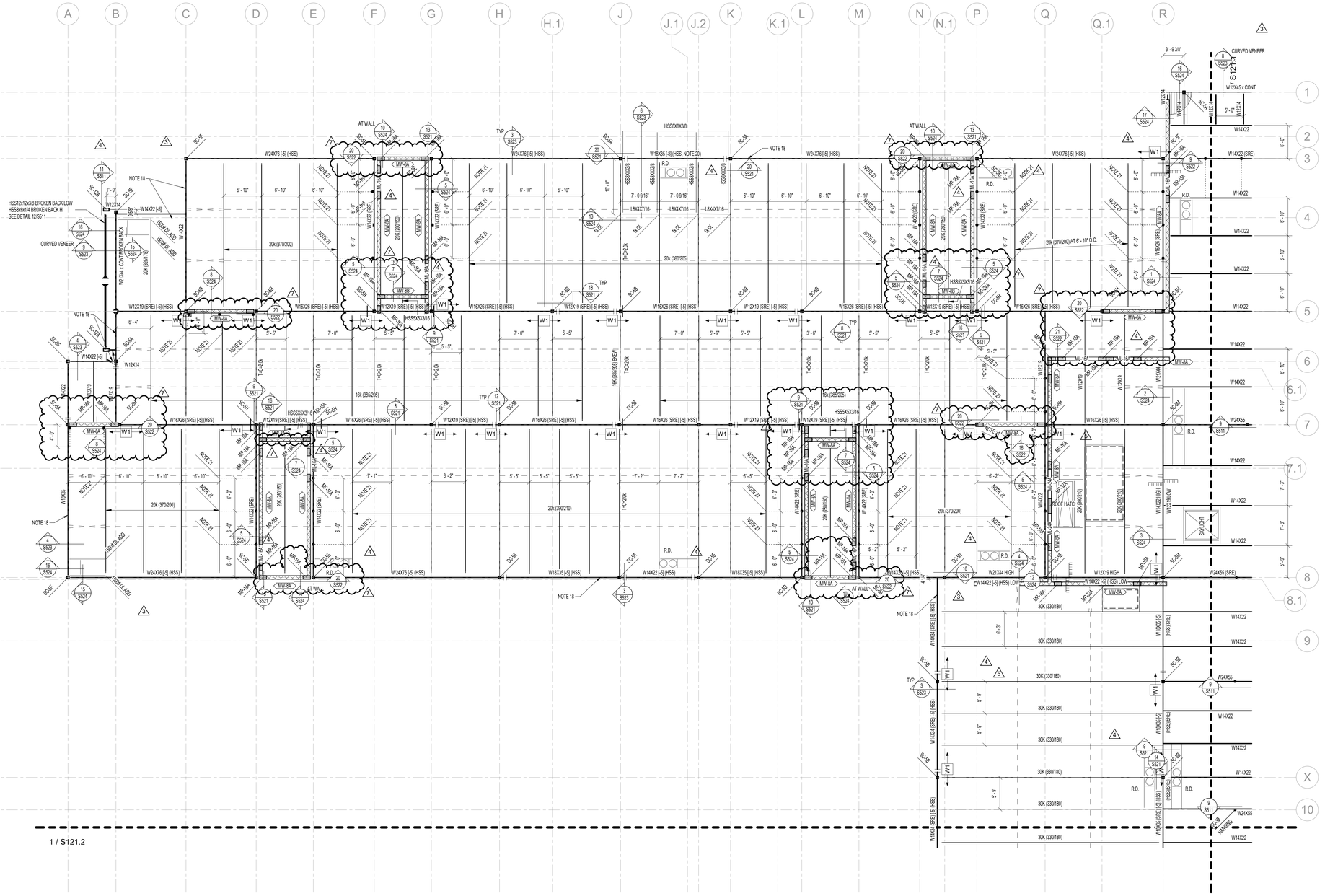


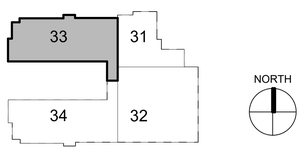
1 AREA 33 ROOF FRAMING PLAN

1/8" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

ROOF FRAMING PLAN NOTES

1. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. ALL JOISTS SHALL HAVE 5" DEEP BEARING ENDS (UNO).
3. ALL ROOF OPENINGS GREATER THAN, OR EQUAL TO, 12" x 12" SHALL BE FRAMED AS INDICATED IN DETAILS 1/SS21 AND 2/SS21. FOR OPENINGS WHICH CUT LESS THAN TWO DECK FLUTES, SEE DETAIL 3/SS21.
4. SEE DETAIL 5/SS11 FOR STEEL BRACE DETAIL CONNECTIONS AND LOCATIONS.
5. SEE DETAIL 4/SS21 WHEN CONCENTRATED LOADS ARE LOCATED MORE THAN 9" FROM JOIST OR JOIST GIRDER PANEL POINT.
6. SEE DETAIL 5/SS21 WHEN MECHANICAL UNITS ARE HUNG BELOW JOISTS.
7. VERIFY SIZE, WEIGHT, AND LOCATION OF ALL ROOF TOP MECHANICAL UNITS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. SEE DETAIL 14/SS24 FOR STEEL FRAMES AT ALL ROOF TOP EQUIPMENT. COORDINATE OPENINGS WITH MECHANICAL, ELECTRICAL, AND GENERAL CONTRACTORS.
8. JOIST SUPPLIER SHALL DESIGN ALL ROOF JOIST BEARING ENDS AT MASONRY WALLS TO TRANSFER 7673 lbs (ALLOWABLE) AXIAL LOAD THROUGH JOIST BEARING ENDS.
9. OPEN WEB STEEL JOISTS SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE MECHANICAL AND LATERAL LOADS SHOWN ON THE ROOF FRAMING PLANS IN ADDITION TO THE UNIFORM AND POINT LOADS SHOWN.
10. JOIST BRIDGING SHOWN ON PLANS IS FOR REPRESENTATION ONLY. ACTUAL SIZE, QUANTITY, AND LOCATION WILL BE DETERMINED BY THE JOIST SUPPLIER PER 'SJI' REQUIREMENTS. ALL BRIDGING AND BRIDGING ANCHORS NEED TO BE IN PLACE BEFORE APPLYING ANY LOADS. WHERE SKYLIGHT OR MECHANICAL UNITS/DUCTS INTERRUPT HORIZONTAL BRIDGING, PROVIDE CROSS BRIDGING AT JOIST SPACES ON EACH SIDE OF THE OPENING. WHERE DIAGONAL BRIDGING CONFLICTS WITH MECHANICAL DUCTS, REMOVE DIAGONAL BRIDGING AND REPLACE WITH HORIZONTAL BRIDGING AFTER ROOF DECK IS IN PLACE.
11. JOIST DESIGNER SHALL DESIGN JOISTS AND SUPPLY ADDITIONAL BRIDGING AS REQUIRED FOR UPLIFT DUE TO WIND. ASSUME:
    - 0.6DL + 8psf
    - 0.6WL + 12psf (UPLIFT).
    - 5psf NET LIFT (ASD)
    - NO 1/3 STRESS INCREASE ALLOWED.
12. SEE DETAIL 9/SS01 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
13. SEE DETAIL 10/SS01 FOR CONDITION AT RECESSES IN MASONRY WALLS.
14. SEE DETAIL 11/SS01 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.
15. SEE DETAIL 12/SS01 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
16. SEE DETAIL 5/SS03 FOR BRACING OF NON-BEARING MASONRY WALLS.
17. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO ALL STEEL COLUMNS.
18. PROVIDE CONTINUOUS VENEER SHELF ANGLE AT HEAD OF LEVEL 2 WINDOWS. SEE DETAILS.
19. AT JOISTS SUPPORTING FOLDING PARTITION, JOIST DESIGNER SHALL LIMIT LIVE LOAD (1.0LL + 1.0SL) TO L/1200 MAXIMUM.
20. WHERE NOTED, SUBSTITUTE HSS8x4x1/4 (LSV) IN LIEU OF HSS5x5x3/16 BLOCKING BETWEEN JOISTS. SEE DETAILS.
21. WHERE NOTED AT BRACE, JOIST DESIGNER SHALL DESIGN JOISTS FOR ADD LOAD OF +/- 200# SEISMIC (ASD).

KEY PLAN - ROOF



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VCBO NUMBER: 230349
DATE: (Issue Date)

LICENSED PROFESSIONAL STRUCTURAL ENGINEER
TRAVIS ROSS BRACKUS
10172017-2202
STATE OF UTAH
12/22/23

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01
4	11-15-2023	CD Set
5	11-16-2023	Addendum 01
7	12-20-2023	PR 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

ROOF FRAMING PLAN - AREA 33

S121.3

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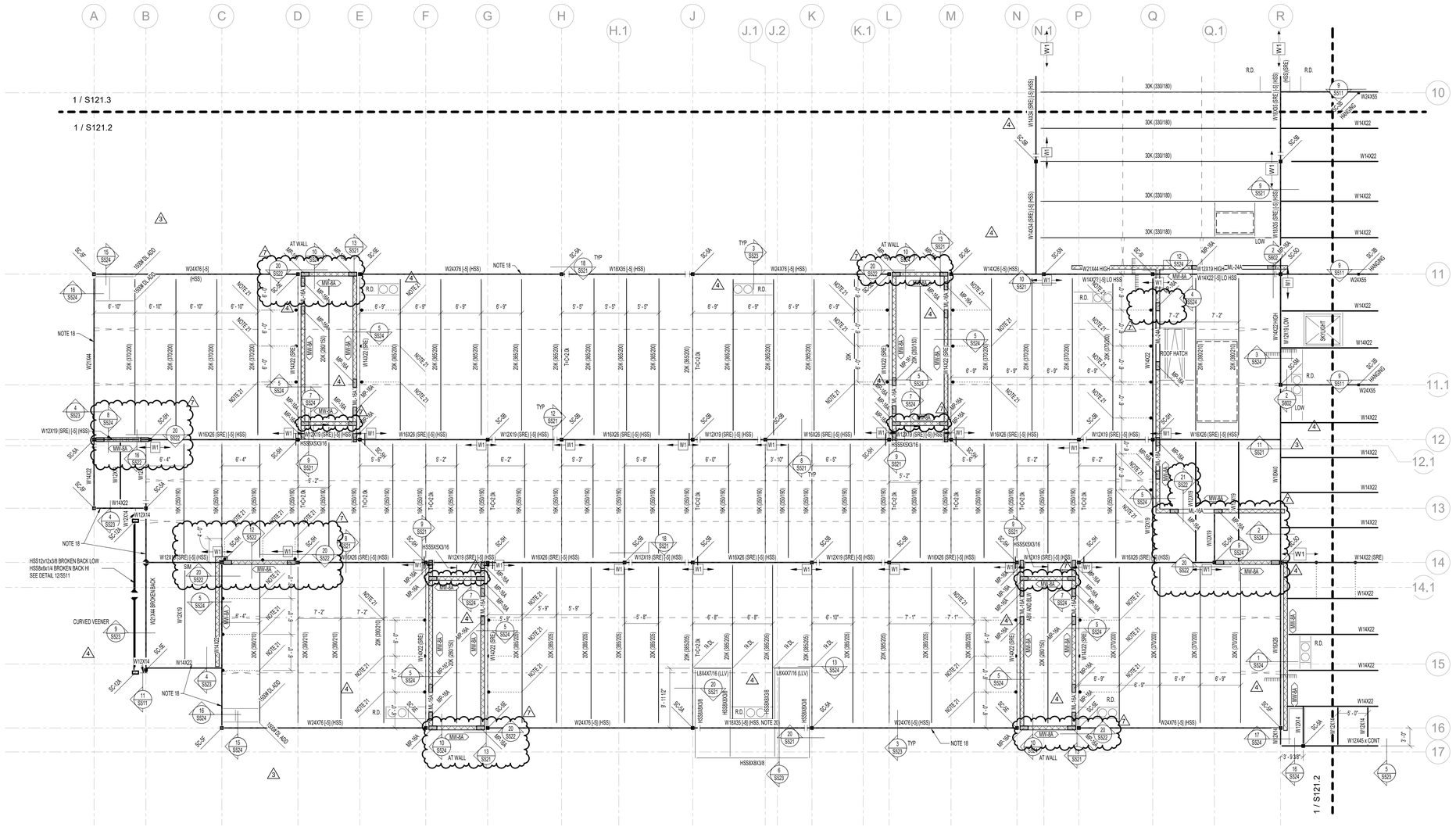

1 AREA 34 ROOF FRAMING PLAN

1/8" = 1'-0" 0" 4'-0" 8'-0" 16'-0"

ROOF FRAMING PLAN NOTES

1. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. ALL JOISTS SHALL HAVE 5" DEEP BEARING ENDS (UNO).
3. ALL ROOF OPENINGS GREATER THAN, OR EQUAL TO, 12" x 12" SHALL BE FRAMED AS INDICATED IN DETAILS 1/SS21 AND 2/SS21. FOR OPENINGS WHICH CUT LESS THAN TWO DECK FLUTES, SEE DETAIL 3/SS21.
4. SEE DETAIL 5/SS11 FOR STEEL BRACE DETAIL CONNECTIONS AND LOCATIONS.
5. SEE DETAIL 4/SS21 WHEN CONCENTRATED LOADS ARE LOCATED MORE THAN 6" FROM JOIST OR JOIST GIRDER PANEL POINT.
6. SEE DETAIL 5/SS21 WHEN MECHANICAL UNITS ARE HUNG BELOW JOISTS.
7. VERIFY SIZE, WEIGHT, AND LOCATION OF ALL ROOF TOP MECHANICAL UNITS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. SEE DETAIL 14/SS24 FOR STEEL FRAMES AT ALL ROOF TOP EQUIPMENT. COORDINATE OPENINGS WITH MECHANICAL, ELECTRICAL, AND GENERAL CONTRACTORS.
8. JOIST SUPPLIER SHALL DESIGN ALL ROOF JOIST BEARING ENDS AT MASONRY WALLS TO TRANSFER 7673 lbs (ALLOWABLE) AXIAL LOAD THROUGH JOIST BEARING ENDS.
9. OPEN WEB STEEL JOISTS SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE MECHANICAL AND LATERAL LOADS SHOWN ON THE ROOF FRAMING PLANS IN ADDITION TO THE UNIFORM AND POINT LOADS SHOWN.
10. JOIST BRIDGING SHOWN ON PLANS IS FOR REPRESENTATION ONLY; ACTUAL SIZE, QUANTITY, AND LOCATION WILL BE DETERMINED BY THE JOIST SUPPLIER PER SJI REQUIREMENTS. ALL BRIDGING AND BRIDGING ANCHORS NEED TO BE IN PLACE BEFORE APPLYING ANY LOADS. WHERE SKYLIGHT OR MECHANICAL UNITS/DUCTS INTERRUPT HORIZONTAL BRIDGING, PROVIDE CROSS BRIDGING AT JOIST SPACES ON EACH SIDE OF THE OPENING. WHERE DIAGONAL BRIDGING CONFLICTS WITH MECHANICAL DUCTS, REMOVE DIAGONAL BRIDGING AND REPLACE WITH HORIZONTAL BRIDGING AFTER ROOF DECK IS IN PLACE.
11. JOIST DESIGNER SHALL DESIGN JOISTS AND SUPPLY ADDITIONAL BRIDGING AS REQUIRED FOR UPLIFT DUE TO WIND. ASSUME:
    - 0.6DL = 8psf
    - 0.6WL = 17psf (UPLIFT)
    - 5psf NET UPLIFT (ASD)
    - NO 1/3 STRESS INCREASE ALLOWED.
12. SEE DETAIL 9/SS21 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN MASONRY WALLS.
13. SEE DETAIL 10/SS21 FOR CONDITION AT RECESSES IN MASONRY WALLS.
14. SEE DETAIL 11/SS21 FOR TYPICAL CONTROL JOINTS IN MASONRY WALLS.
15. SEE DETAIL 12/SS21 FOR TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALLS.
16. SEE DETAIL 5/SS03 FOR BRACING OF NON-BEARING MASONRY WALLS.
17. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO ALL STEEL COLUMNS.
18. PROVIDE CONTINUOUS VENEER SHELF ANGLE AT HEAD OF LEVEL 2 WINDOWS. SEE DETAILS.
19. AT JOISTS SUPPORTING FOLDING PARTITION, JOIST DESIGNER SHALL LIMIT LIVE LOAD (1.0LL + 1.0SL) TO L/1200 MAXIMUM.
20. WHERE NOTED, SUBSTITUTE HSS8x4x1/4 (LSV) IN LIEU OF HSS5x5x3/16 BLOCKING BETWEEN JOISTS, SEE DETAILS.
21. WHERE NOTED AT BRACE, JOIST DESIGNER SHALL DESIGN JOISTS FOR ADD LOAD OF +/- 200# SEISMIC (ASD).

KEY PLAN - ROOF

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LAIE, HI

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VCBO NUMBER: 230349
DATE: (Issue Date)

TRAVIS ROSS BRACKUS
10172017-2202
LICENSED PROFESSIONAL STRUCTURAL ENGINEER
STATE OF UTAH
12/22/23

BHB STRUCTURAL
2766 South Main Street
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bhb@bhbengineers.com

REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01
4	11-15-2023	CD Set
7	12-20-2023	PR 01

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

ROOF FRAMING PLAN - AREA 34

S121.4

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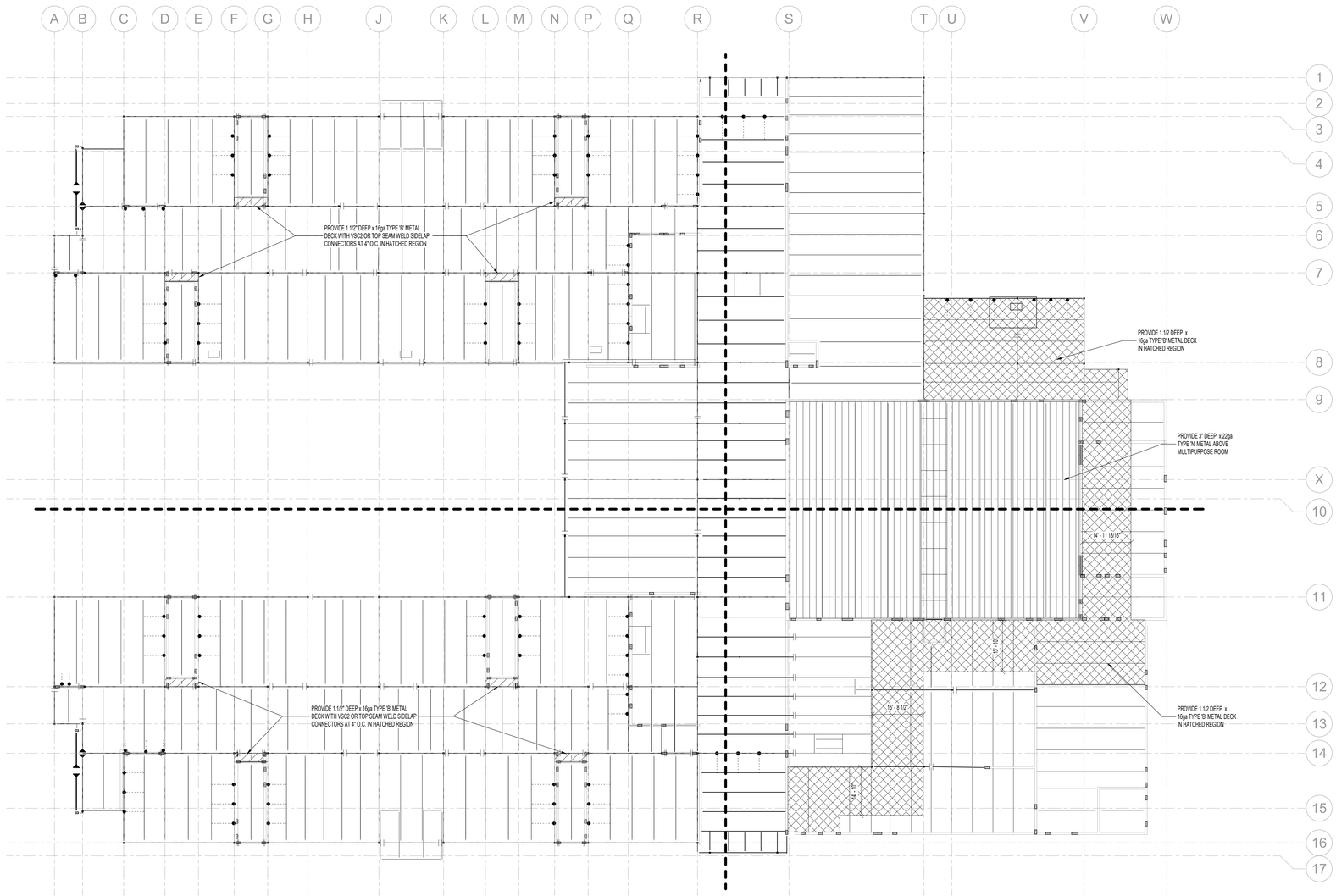
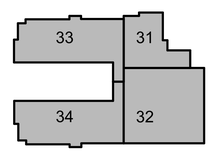


1 DECK PLAN - OVERALL

1/16" = 1'-0" 0" 8'-0" 16'-0" 32'-0"

KEY PLAN - ROOF



NORTH

VCBO

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LAIE, HI

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SALT LAKE CITY, UT 84102
801.575.8800
VCBO.COM

VCBO NUMBER: 230349
DATE: (Issue Date)

PROFESSIONAL STRUCTURAL ENGINEER
No. 9072017-2203
TRAVIS ROSS BRACKUS
STATE OF UTAH
11-8-23

BHB STRUCTURAL
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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

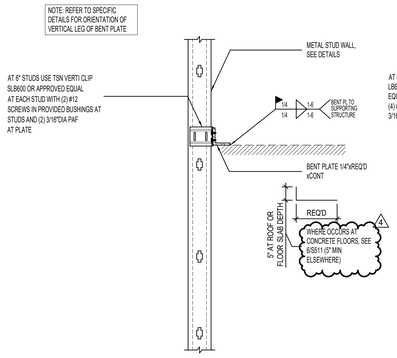
130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

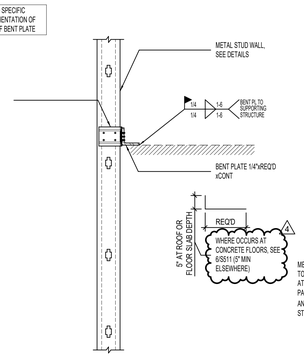
OVERALL DECK PLAN

S122

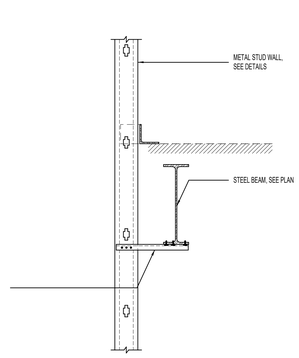
11/8/2023 5:06:55 PM



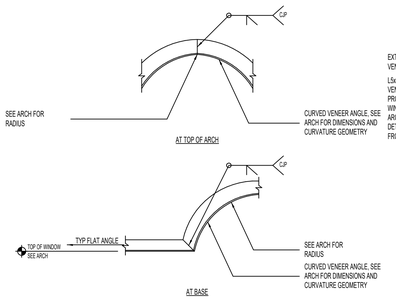
1 TYPICAL METAL STUD FRAMING TO DECK BEARING ANGLE ATTACHMENT [SLIP CONNECTION] — NO SCALE



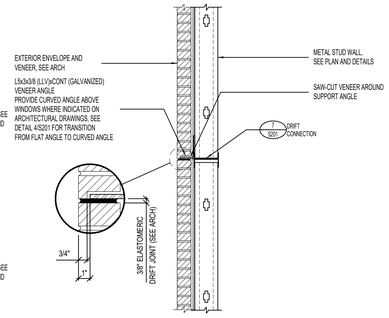
2 TYPICAL METAL STUD FRAMING TO DECK BEARING ANGLE ATTACHMENT [STIFF CONNECTION] — NO SCALE



3 TYPICAL METAL STUD FRAMING TO DECK BEARING ANGLE ATTACHMENT — NO SCALE

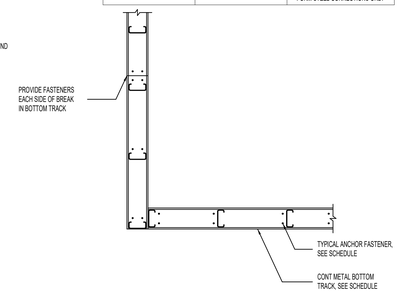


4 CURVED VENEER ANGLE DETAIL — NO SCALE

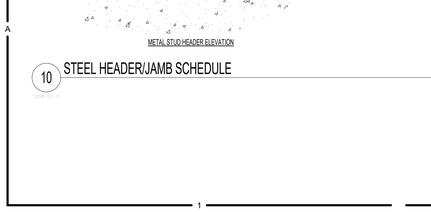


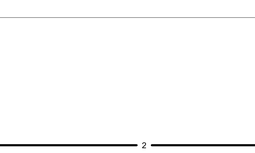
5 TYPICAL JOINT AT VENEER LEDGER ANGLE — NO SCALE

FASTENER TYPE	SIZE AND SPACING	MINIMUM EMBEDMENT INTO CONCRETE
POWDER ACTUATED FASTENER	(2) 0.157" DIA AT 8' O.C.	1"
SCREW ANCHOR	1/4" DIA AT 16" O.C.	1.5/8"
MECHANICAL ANCHOR	1/4" DIA AT 16" O.C.	1.3/4"
SELF-DRILLING SCREWS	(2) #10 STS AT 12" O.C.	NOT ALLOWED IN CONCRETE. COLD FORM STEEL CONNECTIONS ONLY



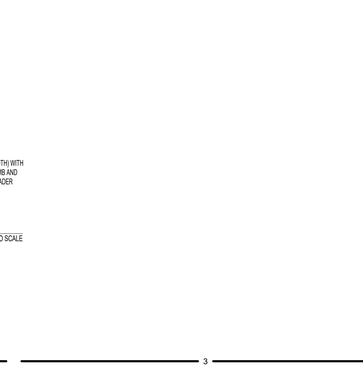
6 EXTERIOR BOTTOM TRACK FASTENER DETAIL [PLAN VIEW] — NO SCALE





7 SLIP AND DEFLECTION TRACK DETAIL — NO SCALE

MANUFACTURER	BRIDGING CHANNEL	BRIDGING ATTACHMENT
GENERIC	1.1/2"x1/2"x54mil	2"x2"x1.1/2"x54mil CLIP ANGLE (3/16" LESS THAN STUD WIDTH) WITH (2)#10 STS AT STUD AND (2)#10 STS AT CHANNEL
"THE STEEL NETWORK"	BB150 OR GENERIC	BC600 WITH (2)#10 STS AT STUD AND (1)#10 STS AT CHANNEL
"SIMPSON"	1.1/2"x1/2"x54mil	SUBH WITH (1)#10 AT CHANNEL
"CLARK DIETRICH"	150US6-54	"EASYCLIP" WITH (2)#10 STS AT STUD AND (2)#10 STS AT CHANNEL OR "FASTBRIDGE" CLIP WITH (2)#10 STS AT CHANNEL



OPTION 1

NOTE: BRIDGING IS REQUIRED AT ALL WALLS AT 6'-0" O.C. MAXIMUM EXCEPT WHERE WALLS ARE SHEATHED ON BOTH SIDES, THEN PROVIDE BRIDGING AT MID-HEIGHT OF WALL +/- 1'-0".

OPTION 2
ABOVE CEILING ONLY

EXTERIOR METAL STUD SKIN WALL SCHEDULE

WALL WIDTH	STUD	SPACING	BOTTOM TRACK	TOP TRACK	NOTE NO. / COMMENTS
3.5/8"	362S162-54	16" O.C.	362T125-54	362T125-54	
6"	600S162-54	16" O.C.	600T125-54	600T125-54	

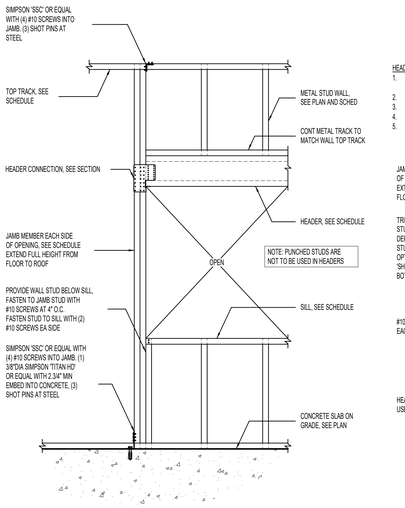
STUD WALL NOTES:
1. ATTACH BOTTOM TRACKS TO SLAB PER DETAIL 6/S201.
2. SEE ARCHITECTURAL DRAWINGS FOR WALL THICKNESS.
3. BRIDGING IS REQUIRED AT ALL WALLS PER DETAIL 8/S201.
4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

8 EXTERIOR NON-BEARING METAL STUD SKIN BRIDGING ATTACHMENTS — NO SCALE

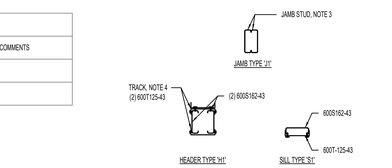
9 EXTERIOR METAL STUD SKIN WALL SCHEDULE — NO SCALE

HEADER/JAMB SCHEDULE

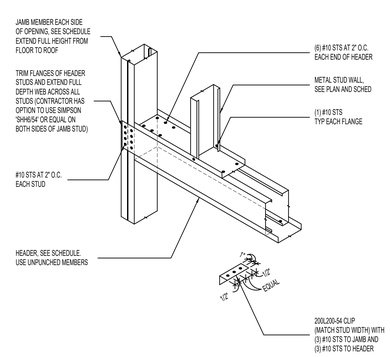
MARK	CONDITION	JAMB TYPE	HEADER TYPE	SILL	COMMENTS
MH-1	METAL STUD	J1	H1	S1	. .



METAL STUD HEADER ELEVATION



HEADER/JAMB NOTES:
1. ATTACH ALL COMPONENTS TOGETHER WITH #10 SCREWS AT 6" O.C. OR ATTACH COMPONENTS 18 GA OR HIGHER WITH 1/8" x 1" FILLET WELDS AT 12" O.C.
2. SCREWS SHALL PENETRATE THROUGH FRAMING MEMBER WITH AT LEAST THREE THREADS.
3. STUDS SHALL BE A MINIMUM OF 1.5/8" WIDE WITH A 3/8" MINIMUM RETURN LIP. JAMB STUD TO MATCH WALL STUD.
4. TRACKS SHALL BE A MINIMUM OF 1.1/4" WIDE, TRACK GAUGE AND DEPTH TO MATCH WALL STUD.
5. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



EXTERIOR METAL STUD SKIN HEADER CONNECTION DETAIL

10 STEEL HEADER/JAMB SCHEDULE — NO SCALE

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STATE OF UTAH
11-8-23

BHB STRUCTURAL
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801-355-5656
bhb@bhbengineers.com

REV	DATE	DESCRIPTION
4	11-1-2023	CD Set

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

METAL STUD SKIN DETAILS

S201

11/9/2023 5:06:55 PM

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BID SET 2 - FTG & FDN PACKAGE

BRACE FRAME ELEVATIONS

S202

8/11/2023 11:48:42 AM

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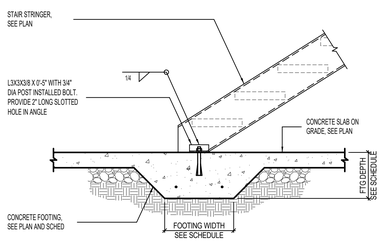
BID SET 2 - FTG & FDN PACKAGE

BRACE FRAME ELEVATIONS

S203

8/11/2023 11:48:42 AM

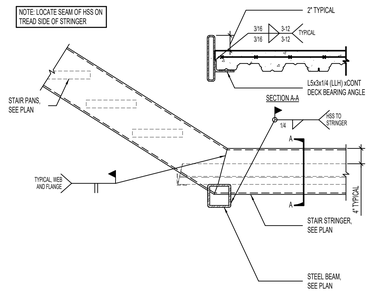
NOTE: LOCATE SEAM OF HSS ON TREAD SIDE OF STRINGER



5 TYPICAL STAIR STRINGER BEARING DETAIL

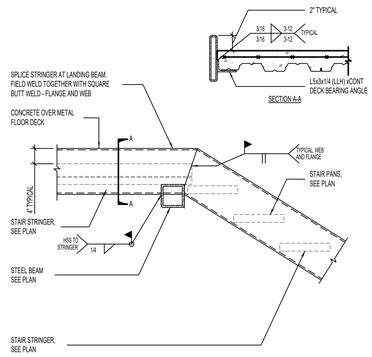
NO SCALE

NOTE: LOCATE SEAM OF HSS ON TREAD SIDE OF STRINGER



2 TYPICAL STAIR FRAMING DETAIL AT LANDING BEAM

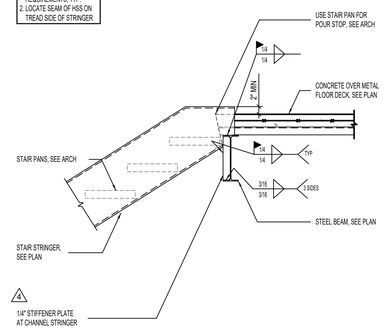
NO SCALE



3 TYPICAL STAIR FRAMING DETAIL AT FLOOR BEAM

NO SCALE

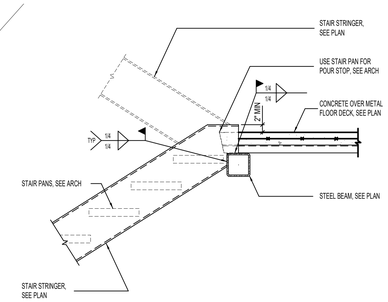
NOTE:
1. SEE 6/S511 FOR SLAB EDGE REQUIREMENTS, TYP.
2. LOCATE SEAM OF HSS ON TREAD SIDE OF STRINGER



4 NOT USED

NO SCALE

NOT USED



NOTE: 1. PROVIDE 3/8" END PLATE AT LANDING BEAM TERMINATION
2. LOCATE SEAM OF HSS ON TREAD SIDE OF STRINGER

5 STAIR LANDING DETAIL

NO SCALE

6 STAIR LANDING DETAIL

NO SCALE

7 STAIR STRINGER CONNECTION AT COLUMN [PLAN VIEW]

NO SCALE

TYPICAL

AT COLUMN

8 DECK EDGE DETAIL AT SUSPENDED WALKWAY

NO SCALE

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4	11-15-2023	CD Set
7	12-20-2023	PR 01

OSD HILLCREST ELEMENTARY REBUILD

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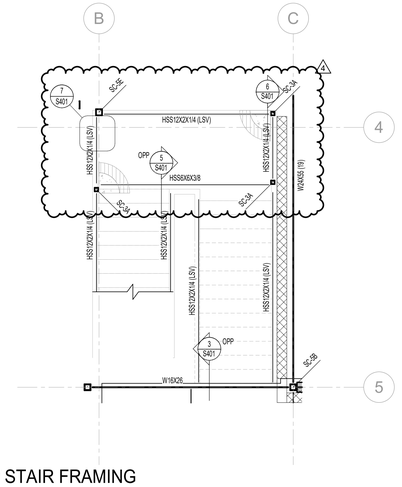
STAIR DETAILS

S401

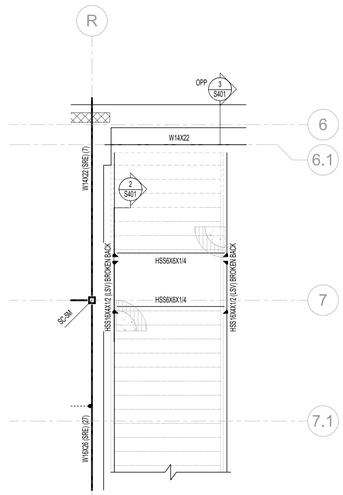
12/22/2023 2:00:31 PM



1 NW STAIR FRAMING

1/4" = 1'-0" 0" 2'-0" 4'-0" 8'-0"

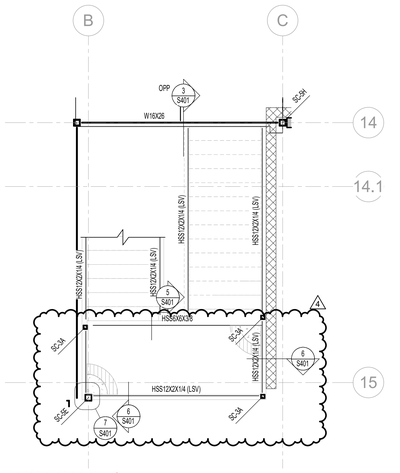
[1/S111.3]



2 NE STAIR FRAMING

1/4" = 1'-0" 0" 2'-0" 4'-0" 8'-0"

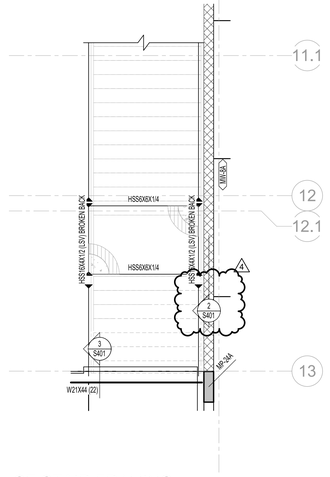
[1/S111.1]



3 SW STAIR FRAMING

1/4" = 1'-0" 0" 2'-0" 4'-0" 8'-0"

[1/S111.4]



4 SE STAIR FRAMING

1/4" = 1'-0" 0" 2'-0" 4'-0" 8'-0"

[1/S111.2]

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REV	DATE	DESCRIPTION
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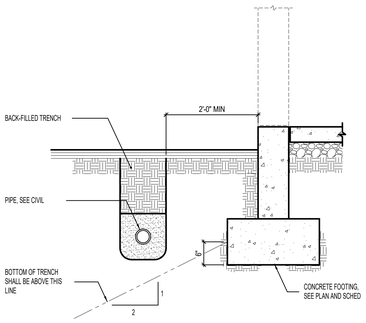
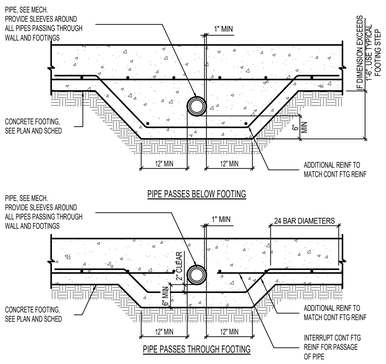
STAIR ENLARGED PLANS

S402

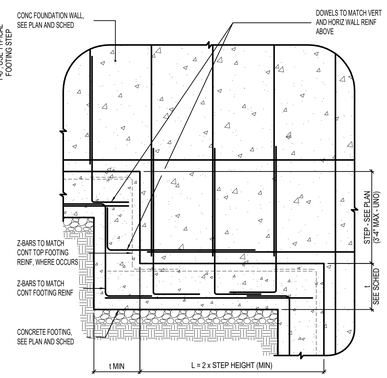
11/8/2023 5:08:58 PM



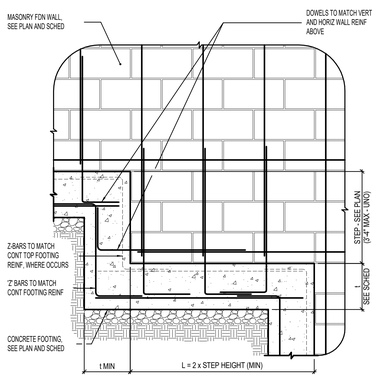
1 CONDITION AT PIPE PARALLEL TO CONCRETE FOOTING — NO SCALE



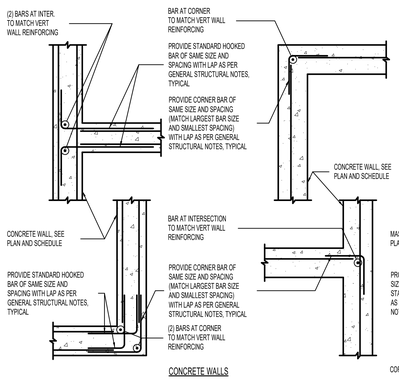
2 CONDITIONS AT PIPE PERPENDICULAR TO FOOTING — NO SCALE



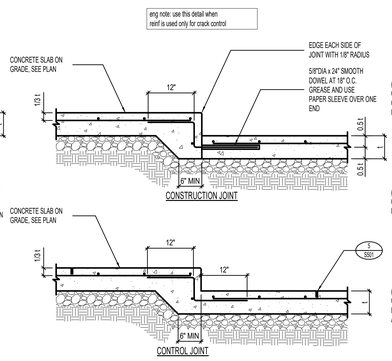
3 TYPICAL FOOTING STEP DETAIL — NO SCALE



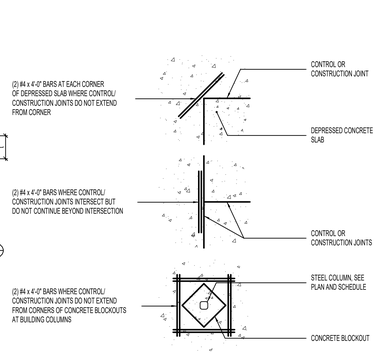
4 TYPICAL CORNER WALL REINFORCING [PLAN VIEW] — NO SCALE



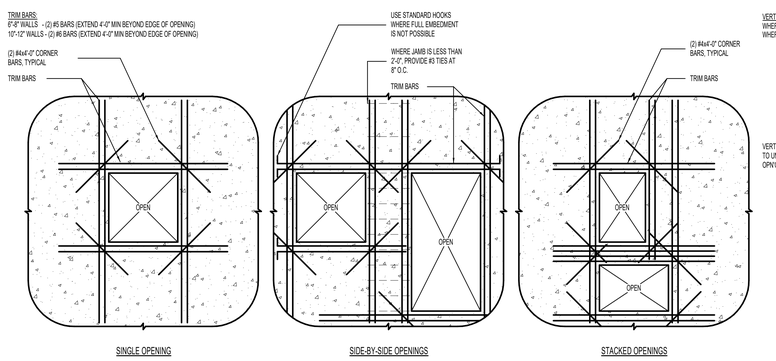
5 TYPICAL SLAB ON GRADE JOINT DETAILS — NO SCALE



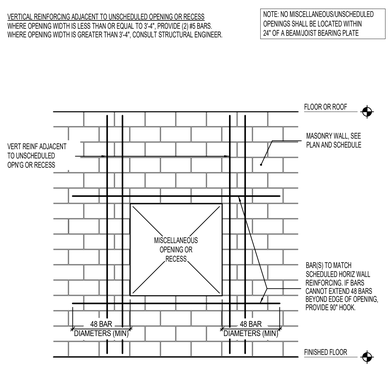
6 JOINT DETAILS AT SLAB DEPRESSIONS — NO SCALE



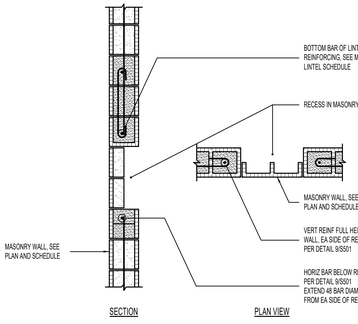
7 LOCATIONS REQUIRING ADDITIONAL SLAB REINFORCING [PLAN VIEW] — NO SCALE



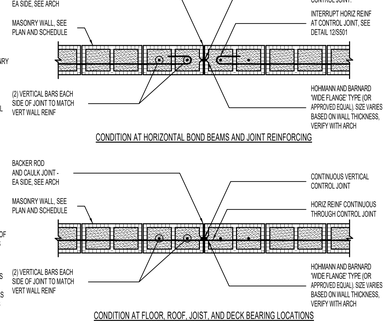
8 TYPICAL REINFORCING FOR MISCELLANEOUS OPENINGS LESS THAN 3'-0" IN CONCRETE WALLS
WHERE MISCELLANEOUS OPENING WIDTH IS GREATER THAN 3'-0" WIDE, CONTACT STRUCTURAL ENGINEER. — NO SCALE



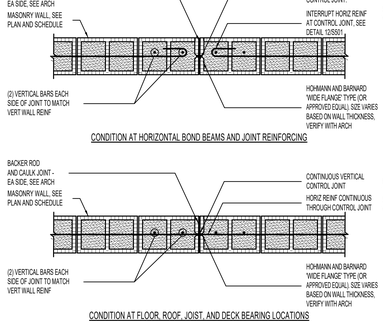
9 REINFORCING AT UNSCHEDULED MISCELLANEOUS OPENINGS OR RECESSES IN MASONRY WALLS — NO SCALE



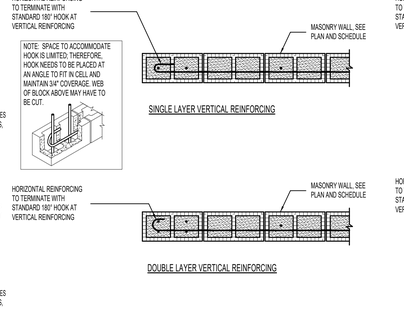
10 TYPICAL REINFORCING AT RECESS IN MASONRY WALLS — NO SCALE

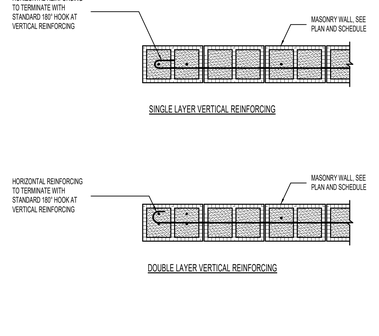


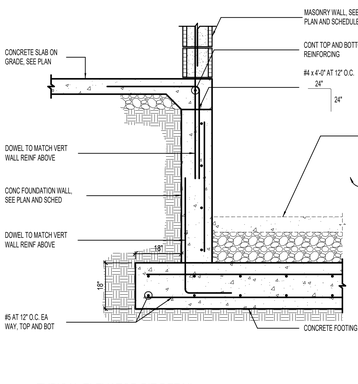
11 MASONRY CONTROL JOINT DETAIL AT MASONRY WALLS — NO SCALE

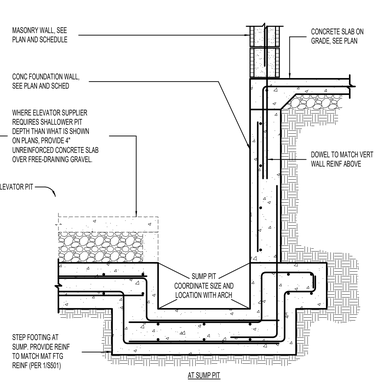


12 TERMINATION OF HORIZONTAL REINFORCING IN MASONRY WALL [PLAN VIEW] — NO SCALE

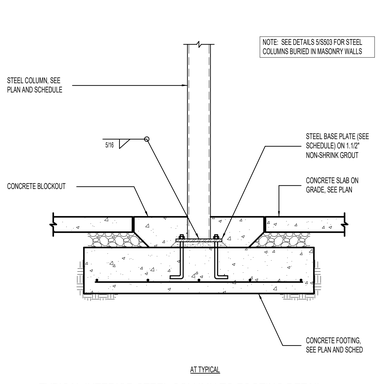


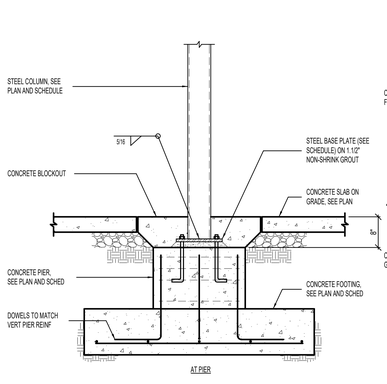




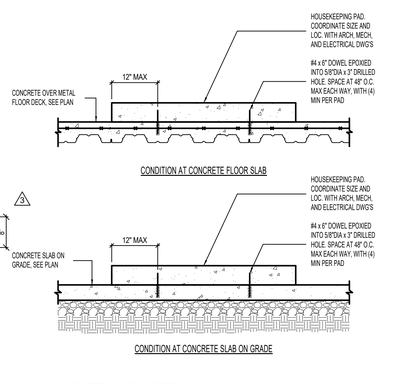


13 TYPICAL ELEVATOR PIT DETAIL — NO SCALE

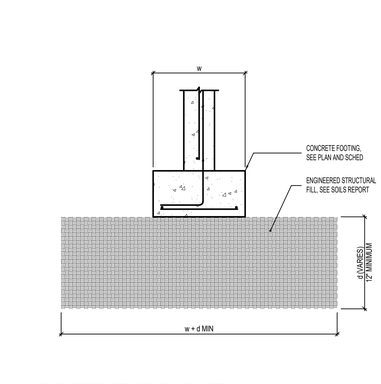




14 TYPICAL INTERIOR STEEL COLUMN TO FOOTING DETAIL — NO SCALE



15 HOUSEKEEPING PAD DETAIL — NO SCALE



16 ENGINEERED STRUCTURAL FILL DETAIL — NO SCALE

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No. 9072017-2203
TRAVIS ROSS BRACKUS
STATE OF UTAH
11-8-23

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REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01

OSD HILLCREST ELEMENTARY REBUILD

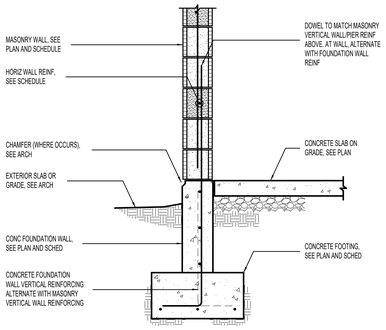
130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

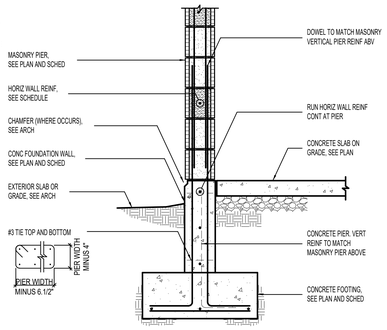
DETAILS

S501

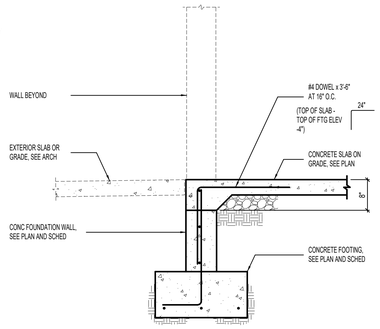
11/8/2023 5:08:59 PM



AT WALL



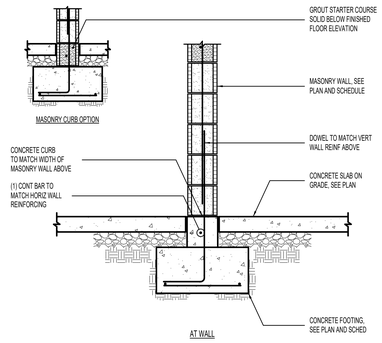
AT PIER



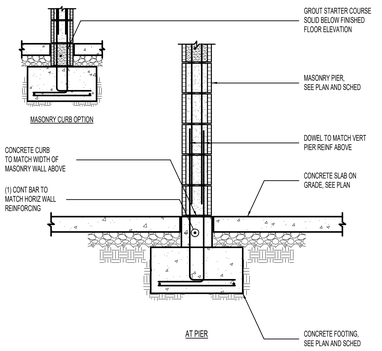
AT OPENING IN WALL

1 TYPICAL EXTERIOR FOUNDATION WALL DETAIL AT MASONRY WALL

NO SCALE



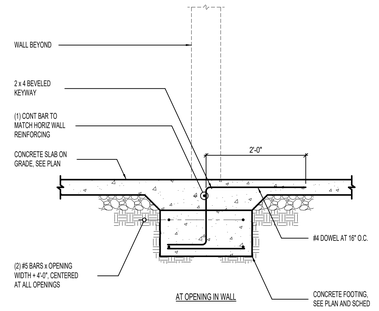
AT WALL



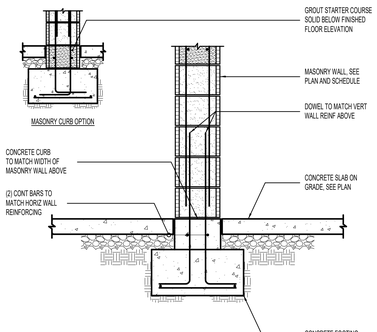
AT PIER

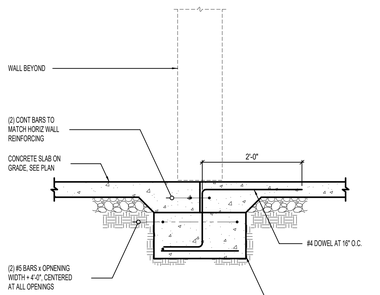
2 TYPICAL INTERIOR MASONRY WALL ON CONCRETE CURB

NO SCALE



AT OPENING IN WALL

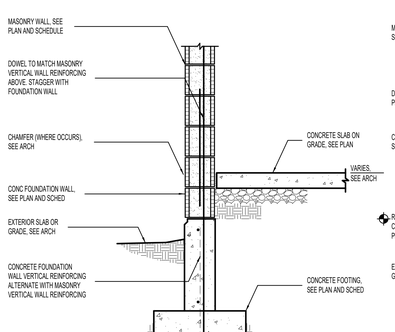




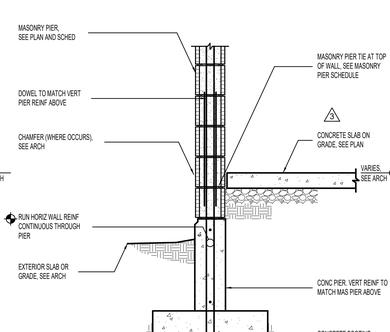
AT WALL OPENING

3 TYPICAL 12" INTERIOR MASONRY WALL ON CONCRETE CURB

NO SCALE



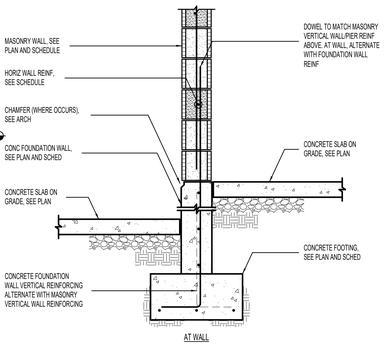
AT WALL



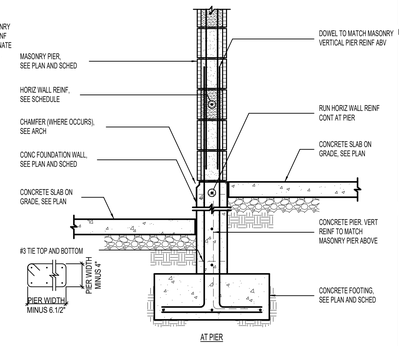
AT PIER

4 FOUNDATION WALL DETAIL AT MASONRY WALL

NO SCALE



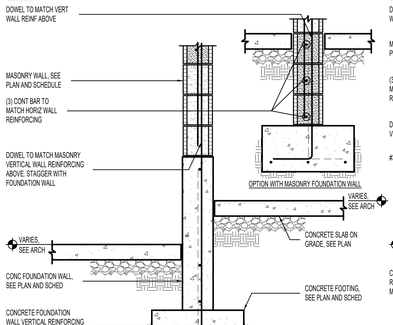
AT WALL



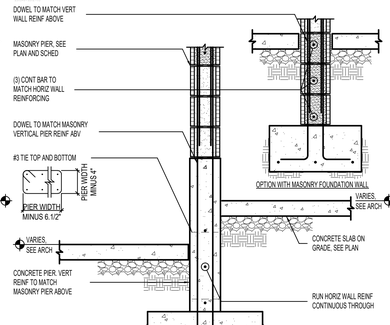
AT PIER

5 FOUNDATION WALL DETAIL AT MASONRY WALL AT SLAB OFFSET

NO SCALE



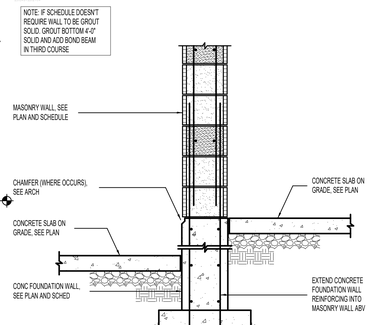
AT WALL



AT PIER

6 INTERIOR MASONRY WALL DETAIL AT RAMP

NO SCALE



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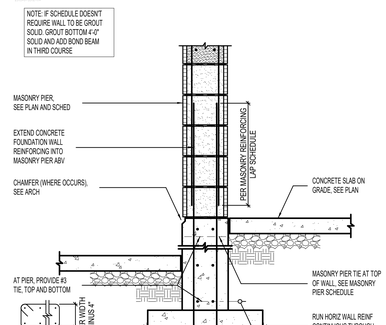
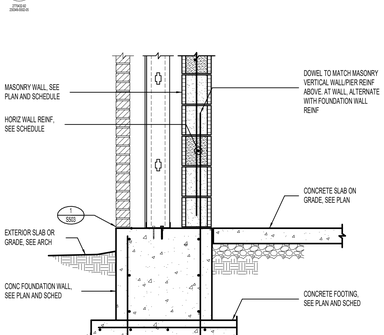


AT PIER

7 FOUNDATION WALL DETAIL AT MASONRY WALL

NO SCALE



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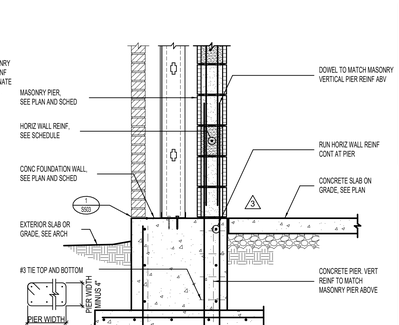
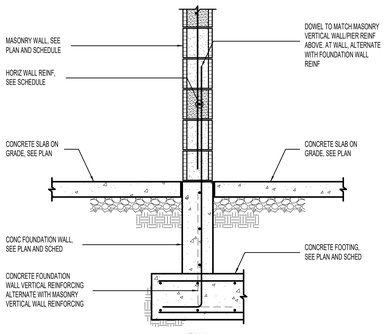


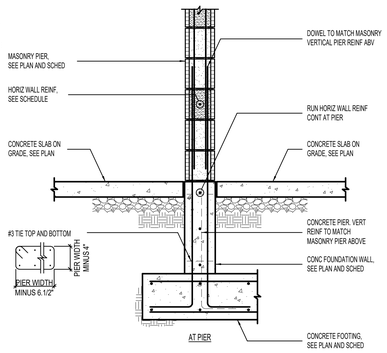
AT PIER

8 TYPICAL EXTERIOR FOUNDATION WALL DETAIL AT MASONRY WALL

NO SCALE



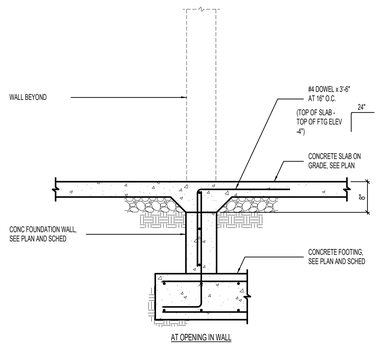
AT WALL



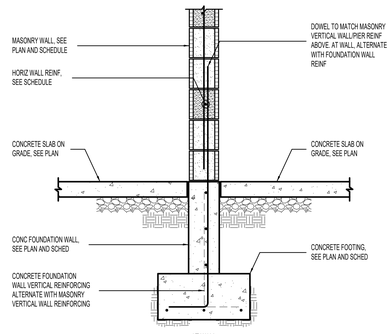
AT PIER

9 TYPICAL MASONRY WALL DETAIL AT MAT FOOTING

NO SCALE



AT OPENING IN WALL



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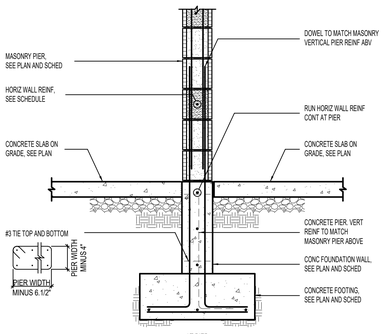
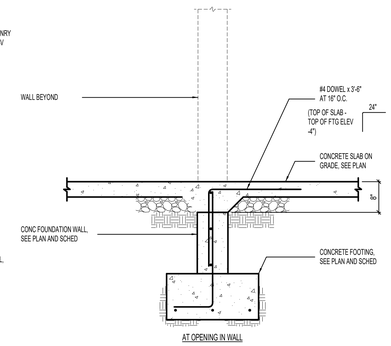


AT PIER



AT OPENING IN WALL

10 TYPICAL EXTERIOR FOUNDATION WALL DETAIL AT MASONRY WALL

NO SCALE

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11-8-23

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REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01

OSD HILLCREST ELEMENTARY REBUILD

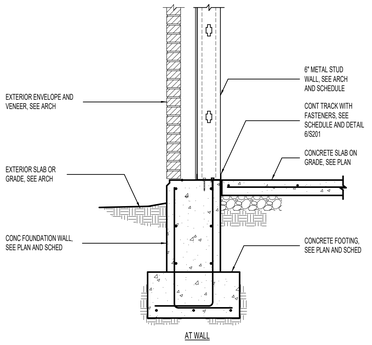
130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

DETAILS

S502

11/8/2023 3:07:02 PM



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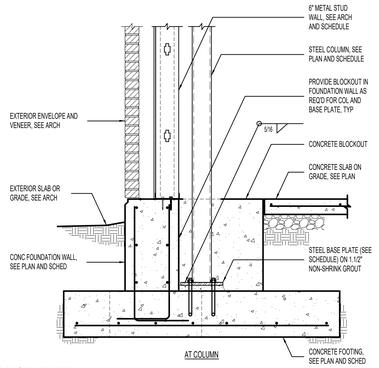
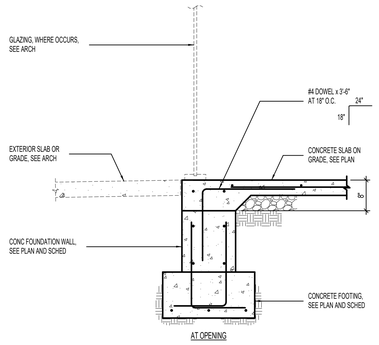


AT COLUMN

1 EXTERIOR FOUNDATION WALL DETAIL AT METAL STUD WALL WITH BRICK VENEER

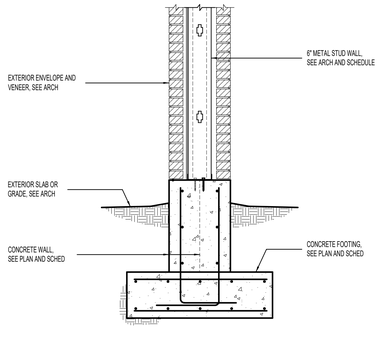
NO SCALE

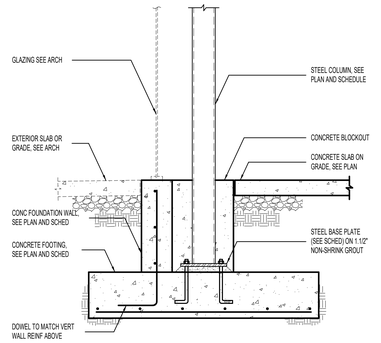


AT OPENING

2 WING WALL DETAIL

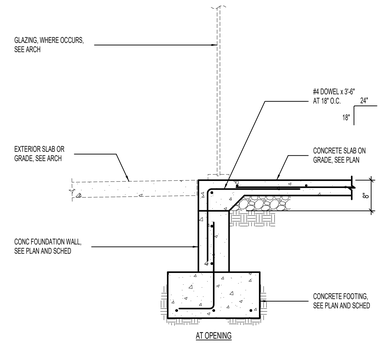
NO SCALE



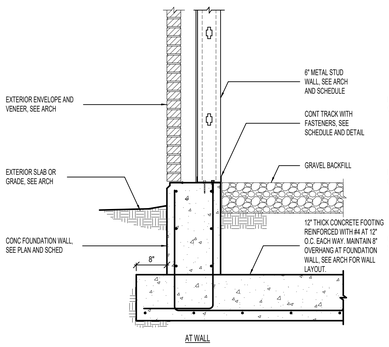


3 STEEL COLUMN AT EXTERIOR WALL

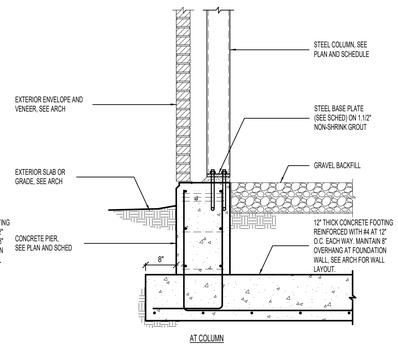
NO SCALE



AT OPENING



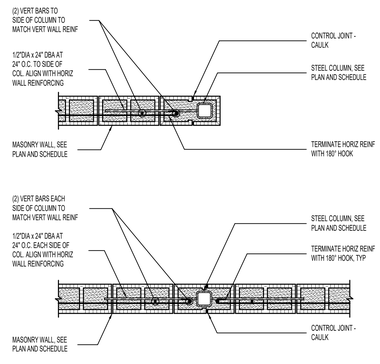
AT WALL



AT COLUMN

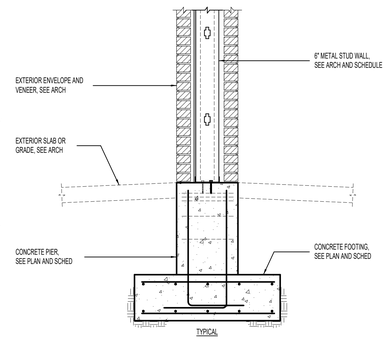
4 EXTERIOR FOUNDATION WALL DETAIL AT METAL STUD WALL WITH BRICK VENEER

NO SCALE



5 TYPICAL STEEL COLUMN BURIED IN MASONRY WALLS [PLAN VIEW]

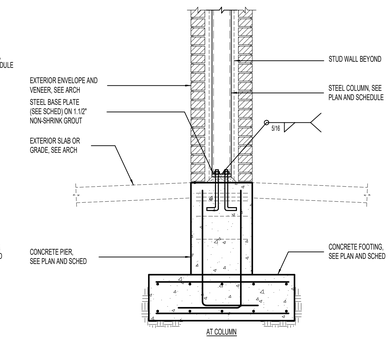
NO SCALE



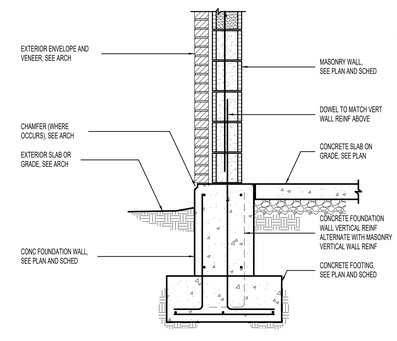
TYPICAL

6 MASONRY PIER DETAIL

NO SCALE

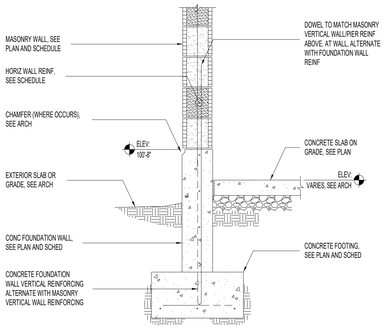


AT COLUMN

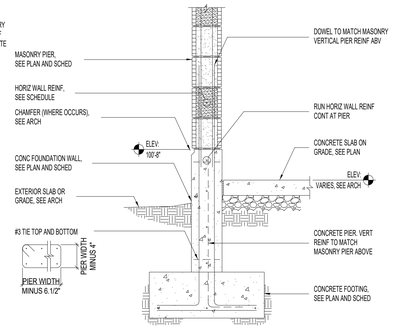


7 FOUNDATION WALL DETAIL AT MASONRY WALLS WITH VENEER

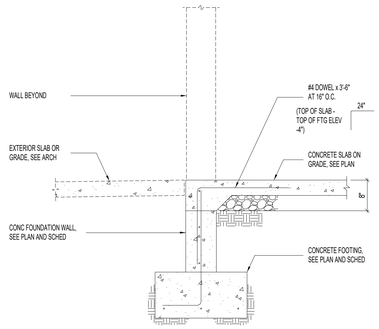
NO SCALE



AT WALL



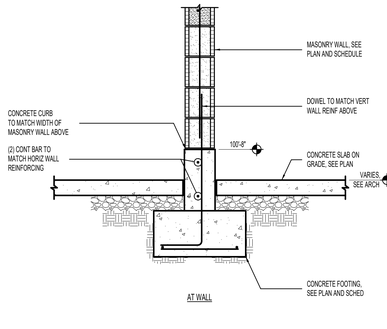
AT PIER



AT OPENING IN WALL

8 TYPICAL EXTERIOR FOUNDATION WALL DETAIL AT MASONRY WALL

NO SCALE



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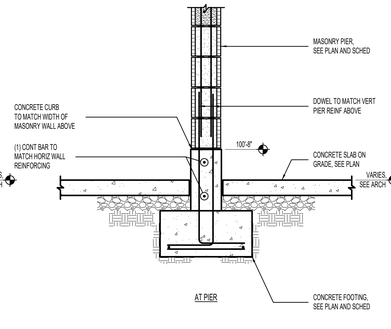

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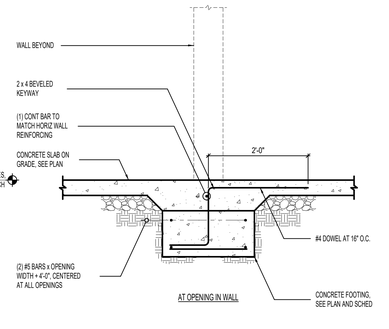

AT OPENING IN WALL

9 TYPICAL INTERIOR MASONRY WALL ON CONCRETE CURB

NO SCALE

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VCBO NUMBER: 230349
DATE: (Issue Date)

PROFESSIONAL STRUCTURAL ENGINEER
No. 9072017-2203
TRAVIS ROSS BRACKUS
STATE OF UTAH
11-8-23

BHB STRUCTURAL
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bhb@bhbengineers.com

REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01

OSD HILLCREST ELEMENTARY REBUILD

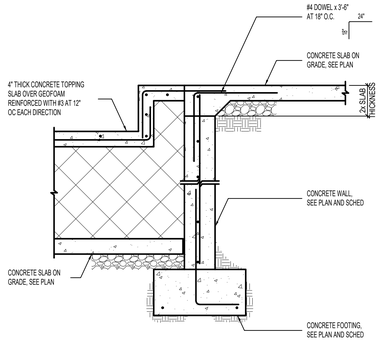
130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

DETAILS

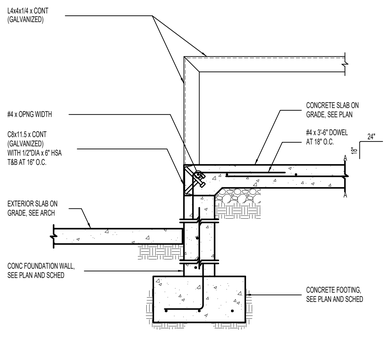
S503

11/8/2023 5:07:02 PM



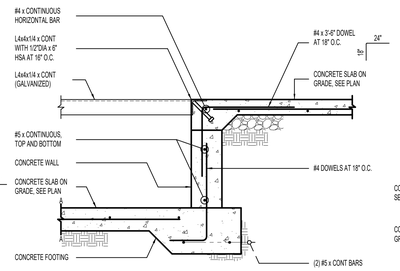
1 OFFSET CONCRETE FOUNDATION WALL AT STAGE

NO SCALE



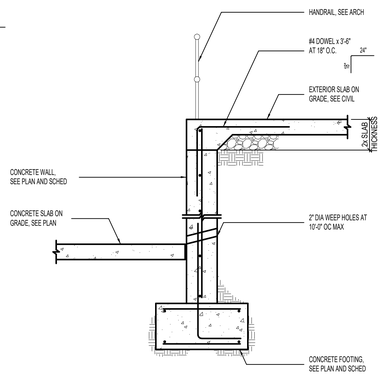
2 TYPICAL DOCK LEVELER PIT DETAIL

NO SCALE



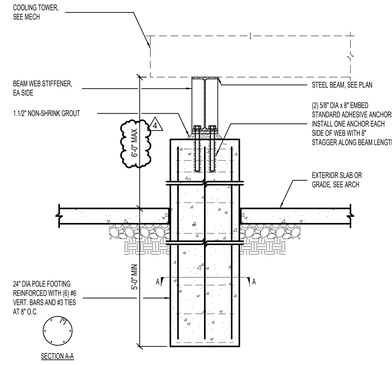
3 CONCRETE RETAINING WALL AT DOCK

NO SCALE



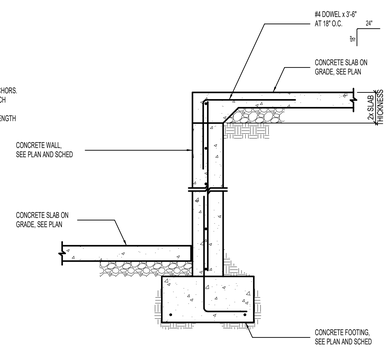
4 TYPICAL FOOTING AT COOLING TOWER

NO SCALE



5 OFFSET CONCRETE FOUNDATION WALL

NO SCALE



6

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11-8-23

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REV	DATE	DESCRIPTION
4	11-1-2023	CD Set

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

DETAILS

S504

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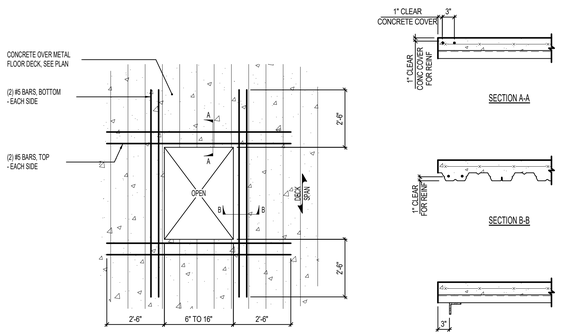
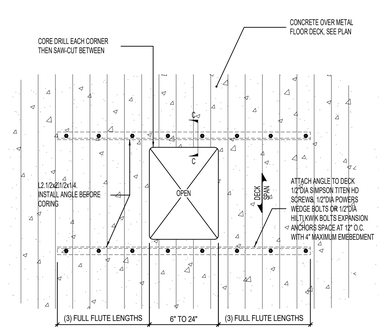
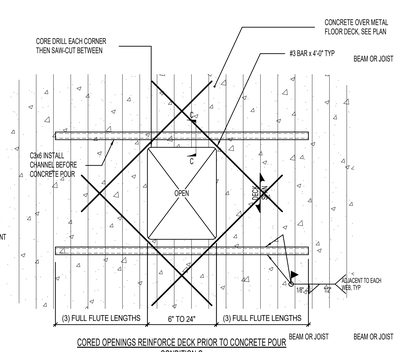


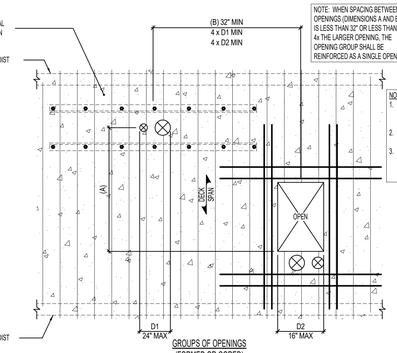
FORMED OPENINGS
CONDITION A



CORED OPENINGS
CONDITION B



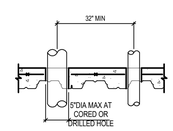
CORED OPENINGS REINFORCE DECK PRIOR TO CONCRETE POUR
CONDITION C



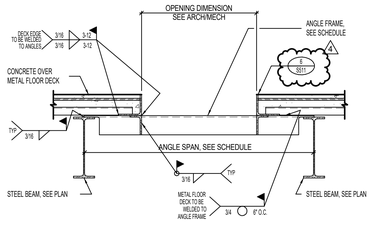
GROUPS OF OPENINGS
(FORMED OR CORED)

NOTE: WHEN SPACING BETWEEN OPENINGS (DIMENSIONS A AND B) IS LESS THAN 32" OR LESS THAN 4x THE LARGER OPENING, THE OPENING GROUP SHALL BE REINFORCED AS A SINGLE OPENING.

NOTES:
1. AT FORMED OPENINGS, LEAVE DECK INTACT AND BLOCK OUT FOR OPENING. REMOVE DECKING AFTER CONCRETE HAS CURED.
2. FOR HOLES THAT DO NOT REQUIRE REINFORCING, SEE DETAIL "CONDITION AT UNREINFORCED OPENING" BELOW.
3. REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS. MANY SMALL OPENINGS ARE NOT SHOWN ON STRUCTURAL PLANS.



CONDITION WHERE REINFORCING IS NOT REQUIRED



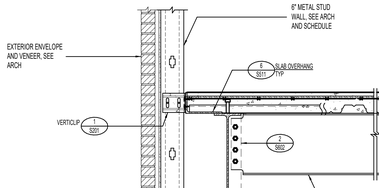
ANGLE FRAME SCHEDULE

ANGLE (LLV)	MAXIMUM ANGLE SPAN (FT)
L5x3x1/4	9'-0"
L5x3x5/16	10'-0"
L5x3x3/8	11'-0"
L6x4x5/16	12'-0"

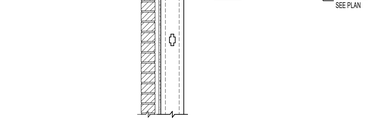
NOTE: FOR OPENINGS GREATER THAN 48", CONTACT STRUCTURAL ENGINEER

1 MISCELLANEOUS SMALL OPENINGS IN FLOOR SLAB (UP TO 24")

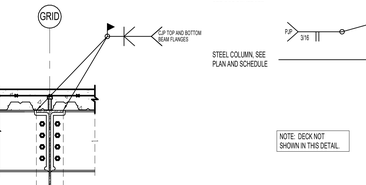
NO SCALE



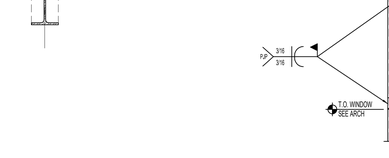
BEAMS FRAMING INTO COLUMNS



BEAMS NOT FRAMING INTO COLUMNS



CONSTRUCTION JOINT IN CONCRETE FLOOR SLAB



BEAMS PARALLEL TO RAISED DECK FLUTES

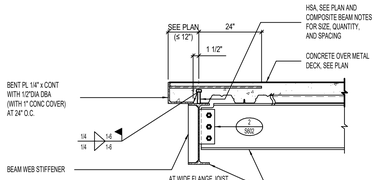
2 TYPICAL FLOOR OPENING DETAIL [OPENING < 48" AND > 24"]

NO SCALE

AT OPEN WEB STEEL JOIST

3 TYPICAL COMPOSITE BEAM DETAILS

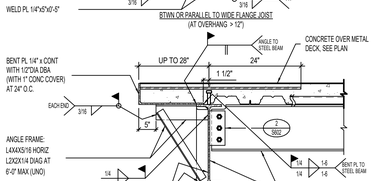
NO SCALE



BTWN OR PARALLEL TO WIDE FLANGE JOIST
(AT OVERHANG ≤ 12")

AT WIDE FLANGE JOIST
(AT OVERHANG ≤ 12")

NOTE:
1. CONTRACTOR HAS OPTION TO CHANGE ANY OF THESE WELDS FROM FIELD TO SHOP WELDS
2. CONTRACTOR HAS OPTION TO REPLACE DBA WITH EQUIVALENT A706 REBAR; PROVIDE 1/4" FILLET WELD TO BENT PL

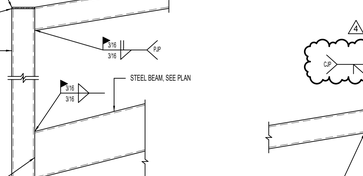


BTWN OR PARALLEL TO WIDE FLANGE JOIST
(AT OVERHANG > 12")

AT WIDE FLANGE JOIST
(AT OVERHANG > 12")

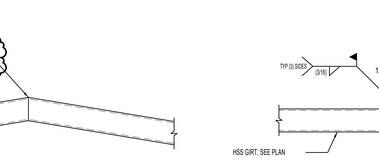
4 TYPICAL STEEL BEAM TO STEEL BEAM CONNECTION

NO SCALE

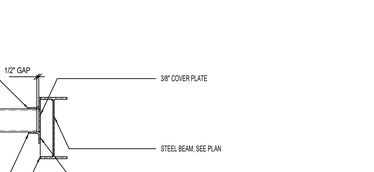


5 TYPICAL BRACE DETAIL

NO SCALE



NOTES:
1. BRACE MAY BE OMITTED AT PERPENDICULAR WIDE FLANGE BEAMS PROVIDED THAT THE REQUIRED MAXIMUM BRACE SPACING IS NOT EXCEEDED.
2. AT CONTRACTORS OPTION, FIELD WELD OF BRACE TO WELD PLATES MAY BY SUBSTITUTED WITH (2) 1/2" DIA BOLTS; PROVIDE 2" SPACING BETWEEN BOLTS
3. AT SLAB EDGES GREATER THAN 12", PROVIDE BRACE AT EACH 'ANGLE FRAME' SUPPORTING SLAB EDGE
4. WHERE SHOWN IN METAL STUD BRACING AND SUPPORT DETAILS. PROVIDE BRACE AT 6'-0" MAX.
5. AT BEAMS LABELED AS 'SRB', PROVIDE BRACE AS INDICATED ON PLANS.



TOP CONNECTION AT PERPENDICULAR TO WIDE FLANGE BEAMS

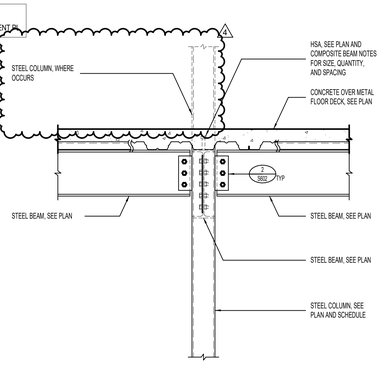
TOP CONNECTION AT PARALLEL TO WIDE FLANGE BEAMS

6 TYPICAL SLAB EDGE DETAIL

NO SCALE

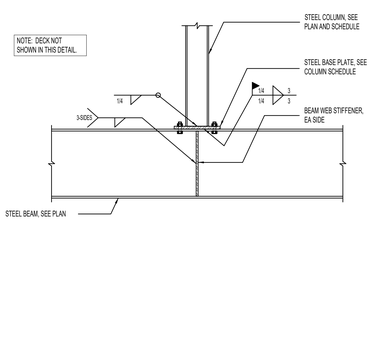
7 TYPICAL STEEL BEAM/DECK BEARING AT STEEL COLUMN

NO SCALE



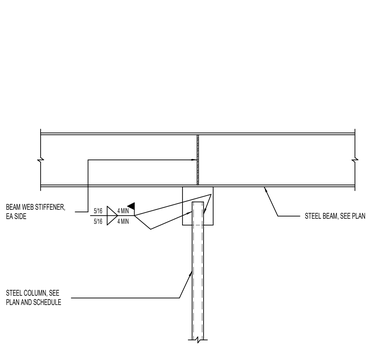
8 STEEL BEAM TRANSFER BEAM DETAIL

NO SCALE



9 HANGING COLUMN DETAIL

NO SCALE



10 TYPICAL FLOOR SLAB DETAILS AT FLOOR POPOUT

NO SCALE

11 STEEL BEAM CONNECTIONS AT ARCHWAY

NO SCALE

12 BROKEN BACK BEAM DETAIL

NO SCALE

13 WIND GIRT CONNECTION AT STEEL BEAM

NO SCALE

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PROFESSIONAL STRUCTURAL ENGINEER
No. 9072017-2203
TRAVIS ROSS BRACKUS
STATE OF UTAH
11-8-23

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

REV	DATE	DESCRIPTION
4	11-1-2023	CD Set

OSD HILLCREST ELEMENTARY REBUILD

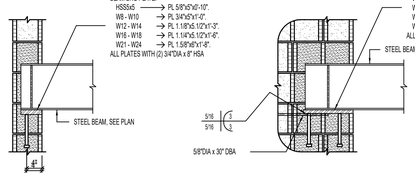
130 N. ECCLES AVE., OGDEN, UT 84404

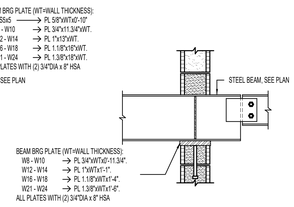
CD SET

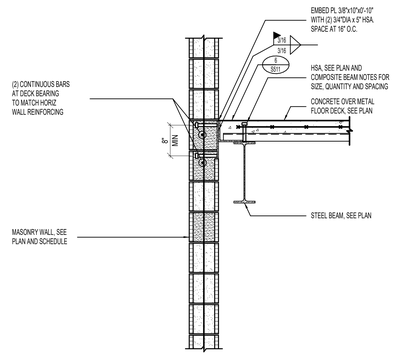
DETAILS

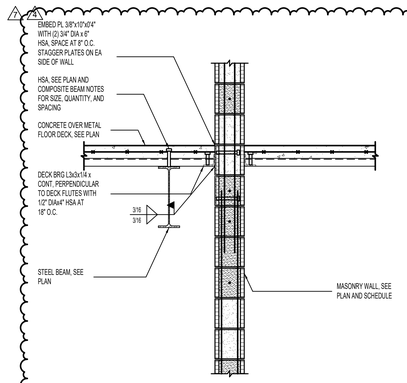
S511

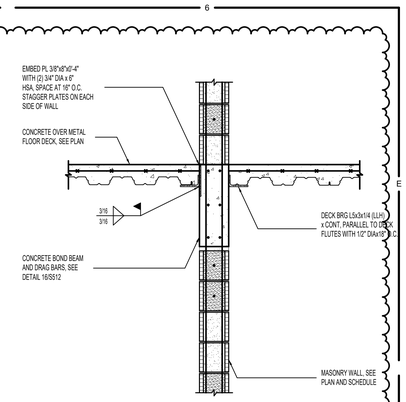
11/8/2023 5:07:01 PM









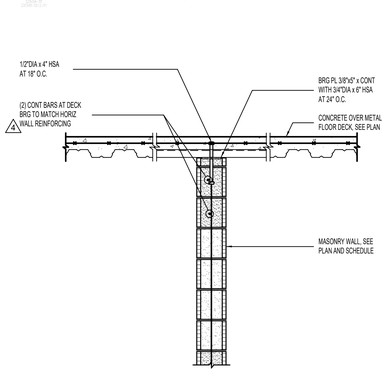


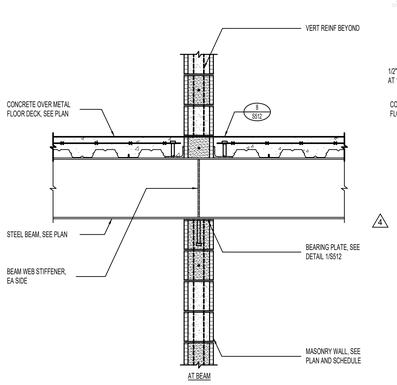
1 BEARING PLATE SCHEDULE FOR FLOOR JOIST/BEAM BEARING AT MASONRY WALLS — NO SCALE

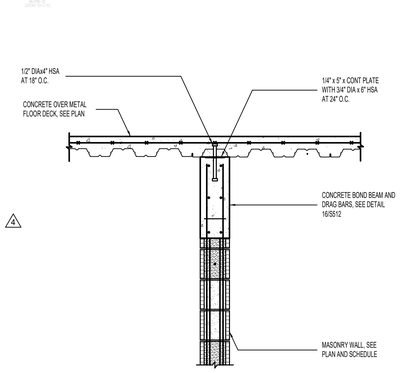
2 MASONRY WALL DETAIL AT STEEL BEAM — NO SCALE

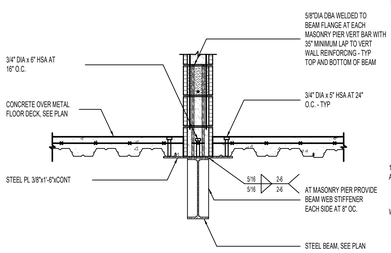
3 MASONRY INFILL WALL AT FLOOR — NO SCALE

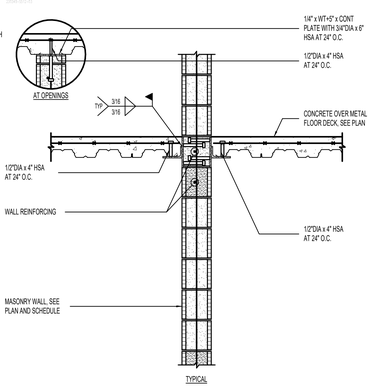
4 MASONRY INFILL WALL AT BEAM — NO SCALE

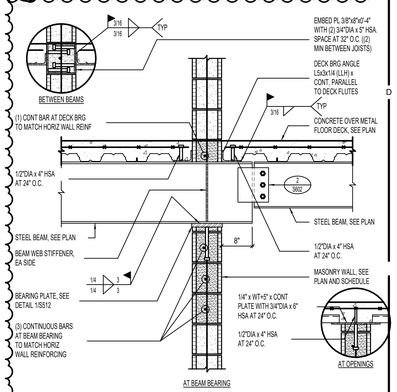










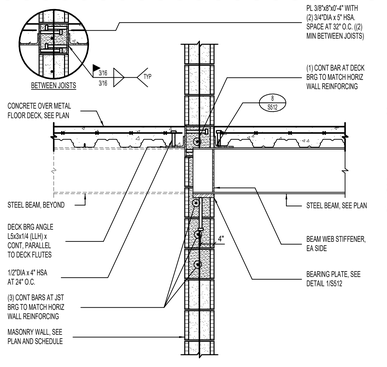


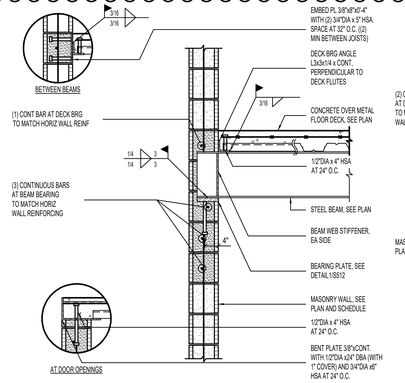
5 MASONRY INFILL WALL AT FLOOR — NO SCALE

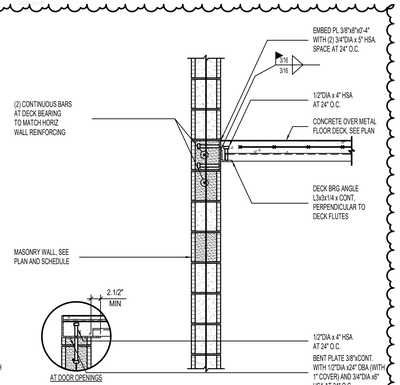
6 MASONRY INFILL WALL AT BEAM — NO SCALE

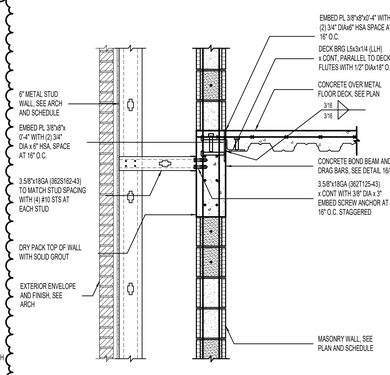
7 MASONRY INFILL WALL AT BEAM — NO SCALE

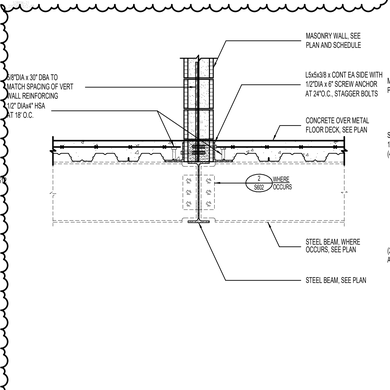
8 TYPICAL DECK BEARING AT INTERIOR MASONRY WALL — NO SCALE

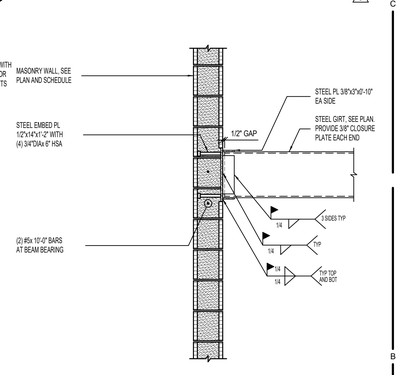












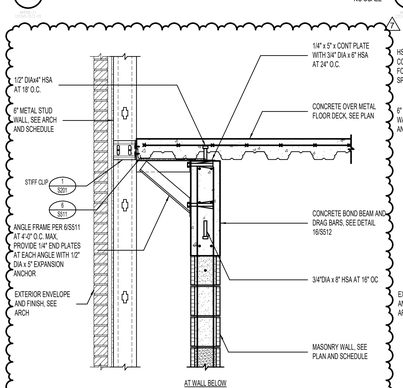
9 STEEL BEAM/DECK BEARING AT MASONRY WALL — NO SCALE

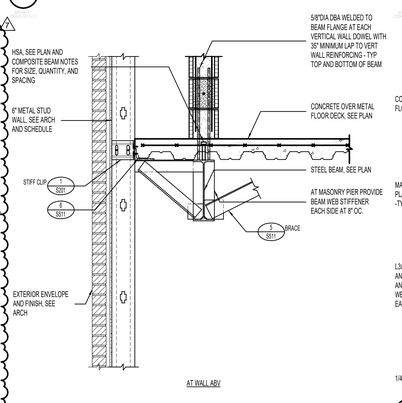
10 TYPICAL STEEL BEAM/DECK BEARING AT MASONRY WALL — NO SCALE

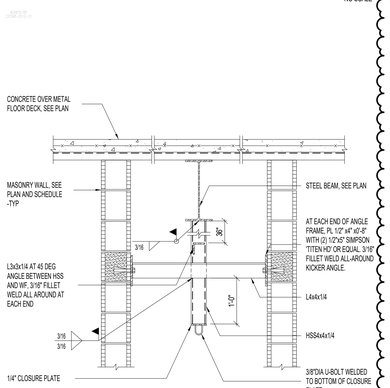
11 MASONRY INFILL WALL AT PERIMETER BEAM — NO SCALE

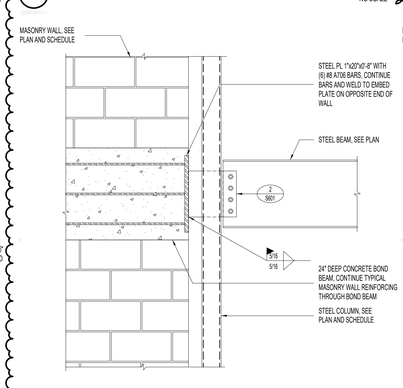
12 STEEL BEAM IN MASONRY WALL — NO SCALE

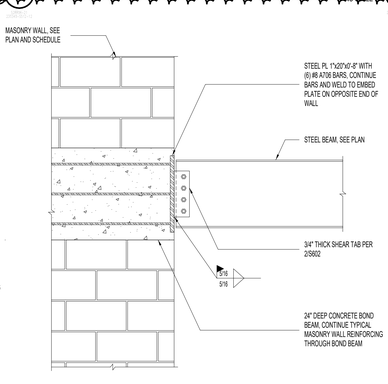
13 WIND GIRT AT MASONRY WALL — NO SCALE











14 MASONRY INFILL WALL AT PERIMETER BEAM — NO SCALE

15 SUSPENDED COLUMN — NO SCALE

16 TYPICAL DRAG CONNECTION AT MASONRY WALL — NO SCALE

17 TYPICAL DRAG CONNECTION AT MASONRY WALL — NO SCALE

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10172017-2202
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REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01
4	11-15-2023	CD Set
5	11-16-2023	Addendum 01
7	12-20-2023	PR 01

OSD HILLCREST ELEMENTARY REBUILD

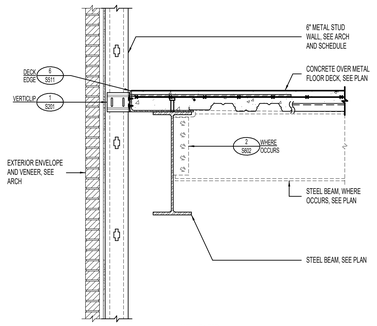
130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

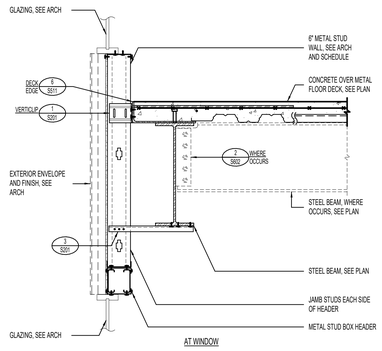
DETAILS

S512

12/22/2023 2:00:32 PM



WITH VENEER



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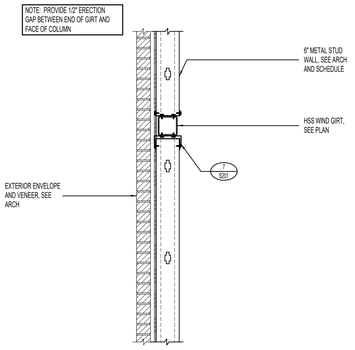
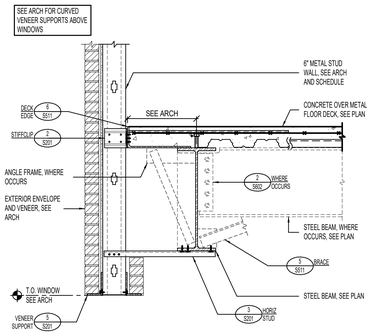
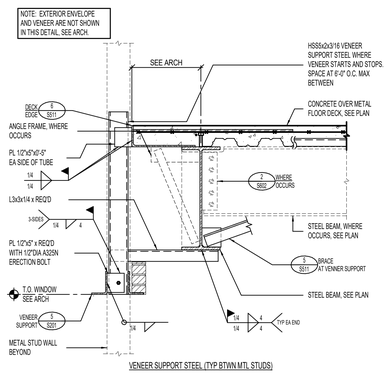
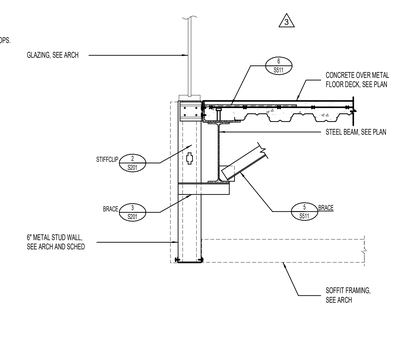




TYPICAL

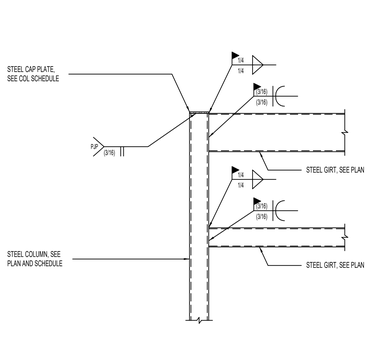


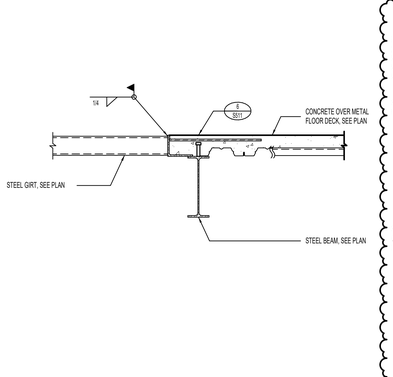
VENEER SUPPORT STEEL (TYP BTWN MTL STUDS)



1 TYPICAL EXTERIOR METAL STUDS AT FLOOR DECK

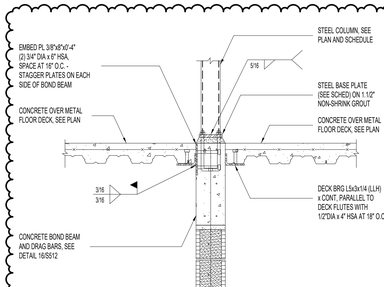
NO SCALE





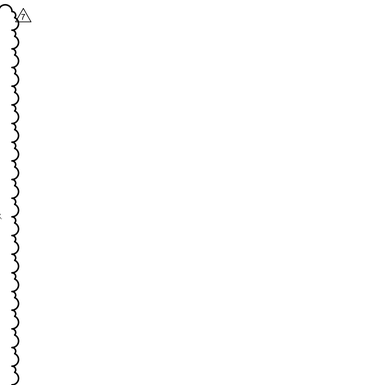
2 TYPICAL WIND GIRT DETAIL

NO SCALE



3 TYPICAL EXTERIOR METAL STUD WALL AT FLOOR DECK WITH VENEER

NO SCALE



LOW SIDE

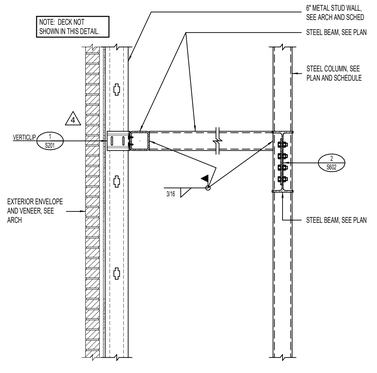
HIGH SIDE - WHERE TOP OF BEAM IS HIGHER THAN GIRDER

4 PERIMETER DETAIL AT OVERHANG

NO SCALE

5 PERIMETER DETAIL AT OVERHANG

NO SCALE



6 ROOF/FLOOR OFFSET DETAIL

NO SCALE

7 ROOF/FLOOR OFFSET DETAIL

NO SCALE

8 ROOF/FLOOR OFFSET DETAIL

NO SCALE

9 ROOF/FLOOR OFFSET DRAG DETAIL

NO SCALE

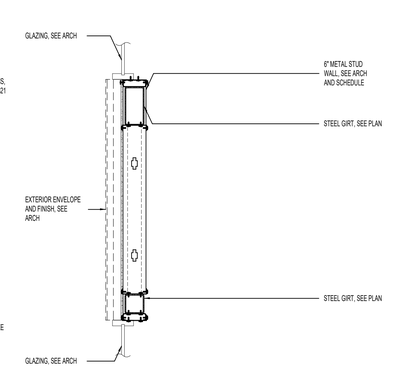
10 METAL STUD WALL DETAIL AT BUMPOUT

NO SCALE

AT WALL

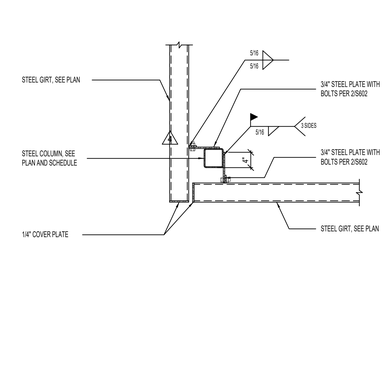
AT GLAZING

AT BEAM



12 WIND GIRT DETAIL AT STAIRWAY

NO SCALE



13 WIND GIRT CONNECTION [PLAN VIEW]

NO SCALE

14 WIND GIRT CONNECTION

NO SCALE

15 WIND GIRT CONNECTION

NO SCALE

16 STEEL COLUMN ON CONCRETE BOND BEAM

NO SCALE

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524 SOUTH 600 EAST
SALT LAKE CITY, UT 84102
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DATE: (Issue Date)

4

LICENSED PROFESSIONAL STRUCTURAL ENGINEER
TRAVIS AGEE BRACKUS
8017017-2202
STATE OF UTAH
12/22/23

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01
4	11-15-2023	CD Set
7	12-20-2023	PR 01

OSD HILLCREST ELEMENTARY REBUILD

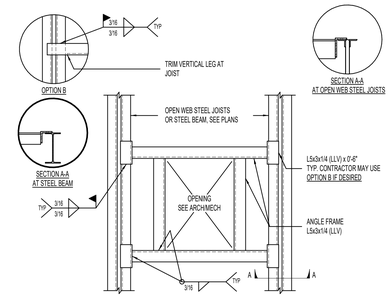
130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

DETAILS

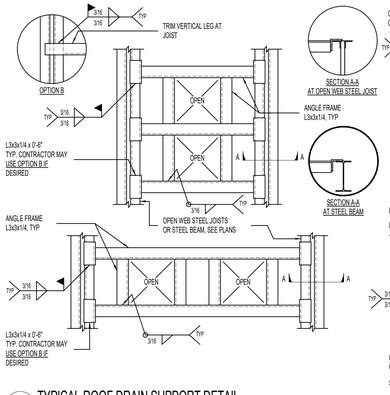
S513

12/22/2023 2:00:33 PM

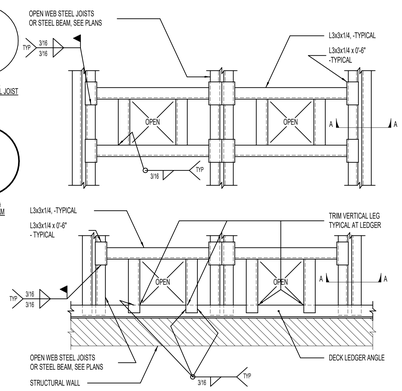


NOTES:
1. SEE DETAIL 3/SS21 FOR OPENINGS LESS THAN 12" IN DIAMETER.
2. PROVIDE EXTRA WEB MEMBERS AT OPEN WEB STEEL JOISTS PER DETAIL 4/S521 FOR OPENINGS 6'-0" AND LARGER.
3. SEE TYPICAL ROOF TOP MECHANICAL UNIT SUPPORT DETAIL(S) FOR FRAMES UNDER MECHANICAL UNITS.
4. ROOF DECK TO BE FASTENED TO ANGLE FRAMING PER GSN REQUIREMENTS.

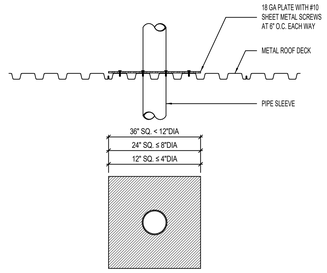
1 TYPICAL ROOF OPENING DETAIL [PLAN VIEW]
NO SCALE



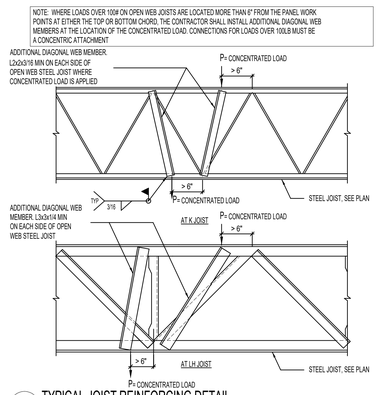
2 TYPICAL ROOF DRAIN SUPPORT DETAIL [PLAN VIEW]
NO SCALE



3 TYPICAL PIPE SLEEVE THROUGH ROOF DECK
NO SCALE

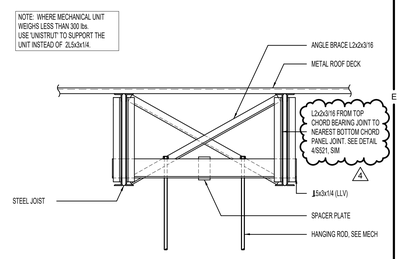


NOTE: WHERE LOADS OVER 100# ON OPEN WEB JOISTS ARE LOCATED MORE THAN 6" FROM THE PANEL WORK POINTS AT EITHER THE TOP OR BOTTOM CHORD, THE CONTRACTOR SHALL INSTALL ADDITIONAL DIAGONAL WEB MEMBERS AT THE LOCATION OF THE CONCENTRATED LOAD. CONNECTIONS FOR LOADS OVER 100LB MUST BE A CONCENTRIC ATTACHMENT

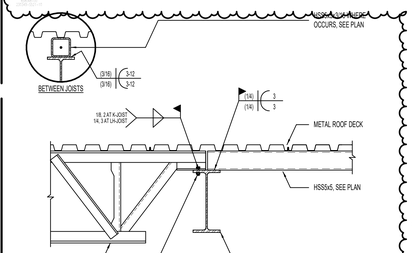


4 TYPICAL JOIST REINFORCING DETAIL FOR LOADS GREATER THAN 100 POUNDS
NO SCALE

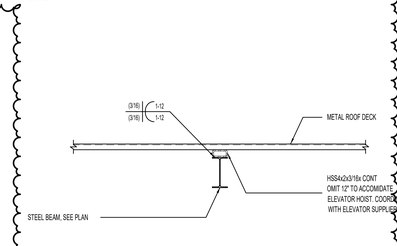
NOTE: WHERE MECHANICAL UNIT WEIGHS LESS THAN 300 lbs. USE 'UNISTRUT' TO SUPPORT THE UNIT INSTEAD OF 2L5x3x1/4.



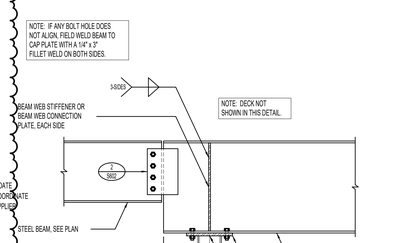
5 TYPICAL HANGING MECHANICAL UNIT SUPPORT DETAIL
NO SCALE

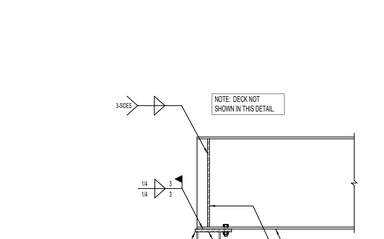


6 TYPICAL DECK EDGE DETAIL
NO SCALE

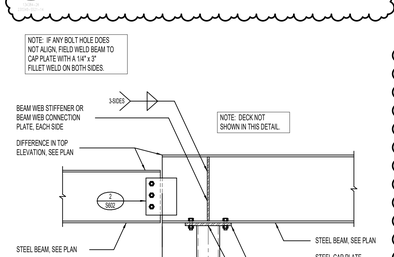


7 TYPICAL SLAB EDGE DETAIL AT OPEN WEB STEEL JOIST
NO SCALE

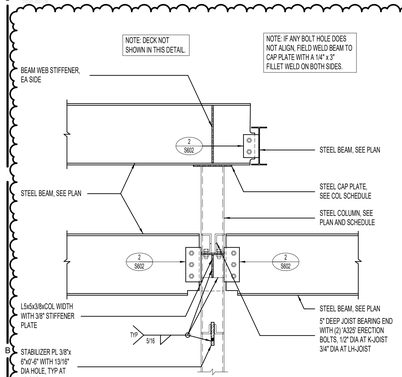




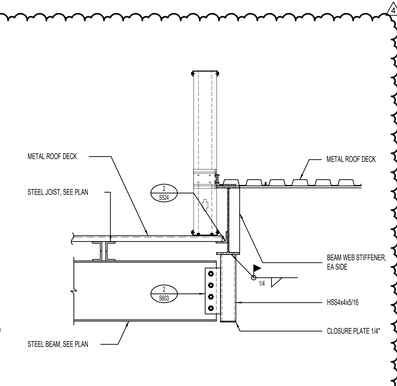
8 TYPICAL JOIST BEARING AT STEEL BEAM
NO SCALE



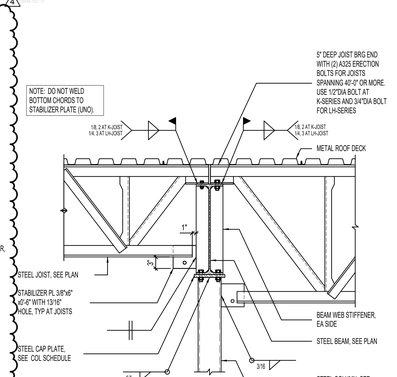
9 TYPICAL JOIST/BEAM BEARING AT STEEL BEAM
NO SCALE



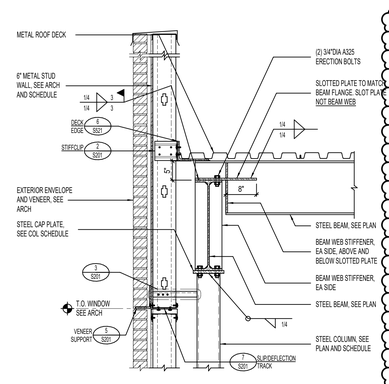
10 HI AND LOW COLUMN CONNECTION
NO SCALE



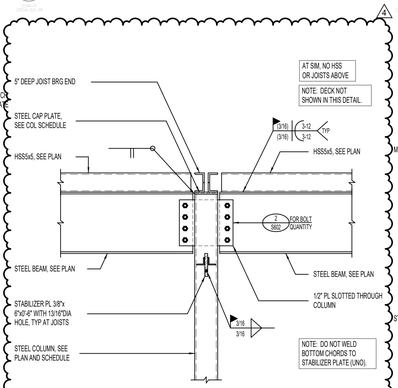
11 TYPICAL JOIST (5" BEARING ENDS) BEARING AT STEEL COLUMN
NO SCALE



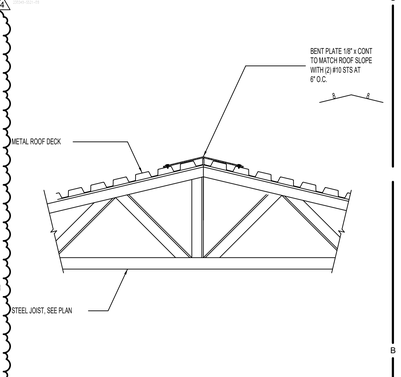
12 TYPICAL JOISTS (5" BEARING END) BEARING AT STEEL COLUMN/BEAM
NO SCALE



13 BEAM BEARING DETAIL AT STEEL BEAM
NO SCALE



14 TYPICAL STEEL BEAM BEARING EXTERIOR STEEL COLUMN
NO SCALE



15 ROOF JOIST AT RIDGE
NO SCALE

16 STEEL TUBE/JOIST (5" BRG END) BEARING AT STEEL BEAM
NO SCALE

17 HOIST BEAM DETAIL
NO SCALE

18 TYPICAL DROP-IN STEEL BEAM CONNECTION AT STEEL COLUMN
NO SCALE

19 TYPICAL STEEL BEAM BEARING AT STEEL COLUMN
NO SCALE

20 LOW BEAM AT POPOUT
NO SCALE

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SALT LAKE CITY, UT 84102
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VCBO NUMBER: 230349
DATE: (Issue Date)

PROFESSIONAL STRUCTURAL ENGINEER
No. 9072017-2203
TRAVIS ROSS BRACKUS
STATE OF UTAH
11-8-23

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2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

REV	DATE	DESCRIPTION
4	11-1-2023	CD Set

OSD HILLCREST ELEMENTARY REBUILD

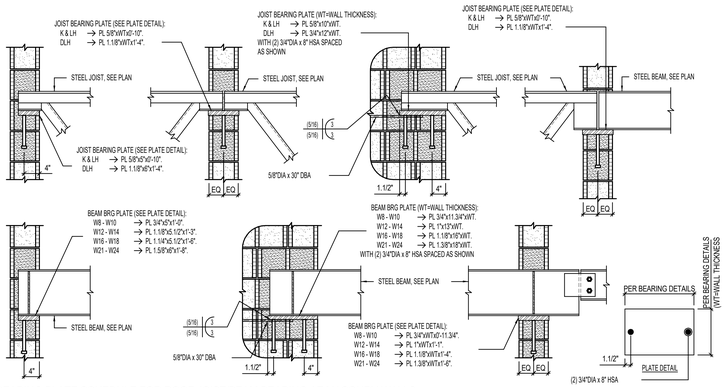
130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

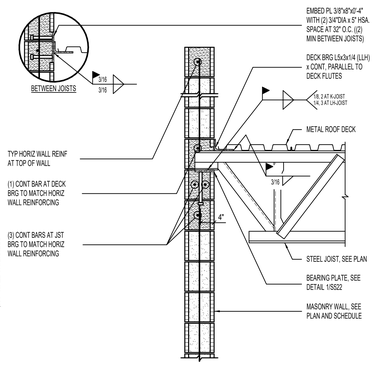
DETAILS

S521

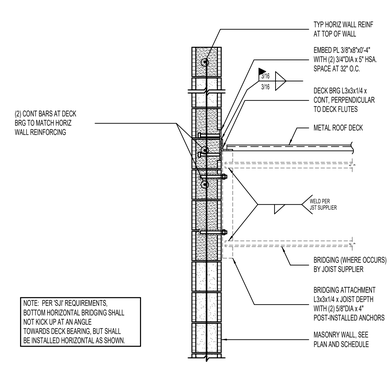
11/8/2023 5:07:04 PM



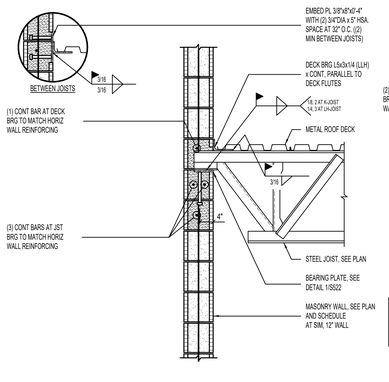
1 BEARING PLATE SCHEDULE FOR ROOF JOIST/BEAM BEARING AT MASONRY WALLS — NO SCALE



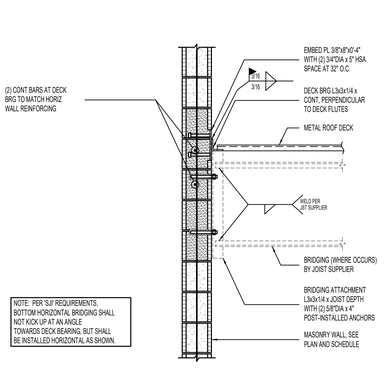
2 TYPICAL JOIST BEARING AT MASONRY WALL — NO SCALE



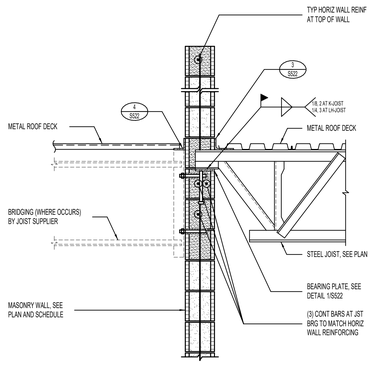
3 TYPICAL DECK BEARING WITH BRIDGING ATTACHMENT AT MASONRY WALL — NO SCALE



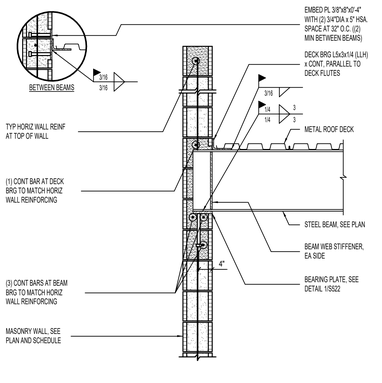
4 TYPICAL JOIST BEARING AT MASONRY WALL — NO SCALE



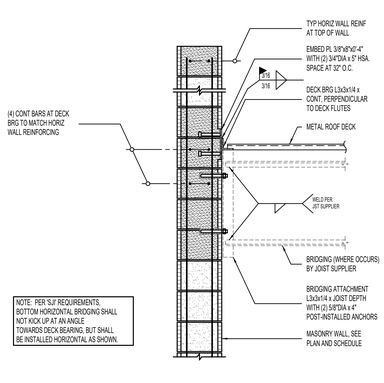
5 TYPICAL DECK BEARING WITH BRIDGING ATTACHMENT AT MASONRY WALL — NO SCALE



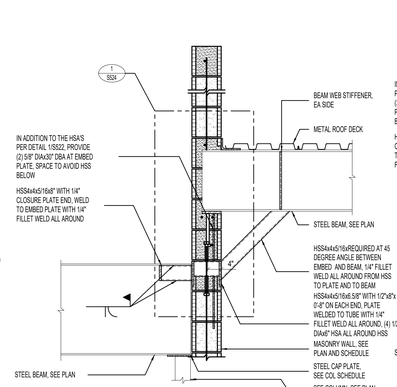
6 DECK BEARING AT MASONRY WALL WITH BRIDGING ATTACHMENT — NO SCALE



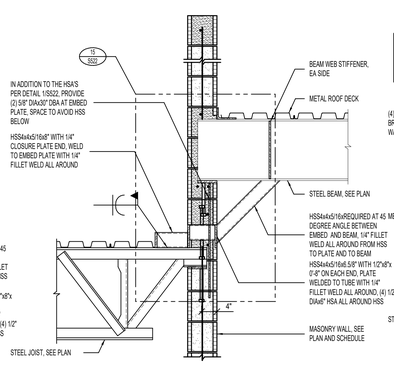
7 TYPICAL STEEL BEAM/DECK BEARING DETAIL AT MASONRY WALL — NO SCALE



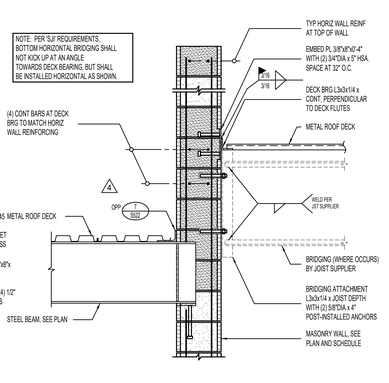
8 TYPICAL DECK BEARING WITH BRIDGING ATTACHMENT AT 12" MASONRY WALLS — NO SCALE



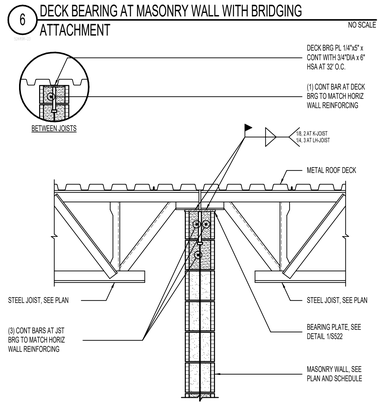
9 STEEL BEAM/DECK DRAG DETAIL AT ROOF OFFSET — NO SCALE



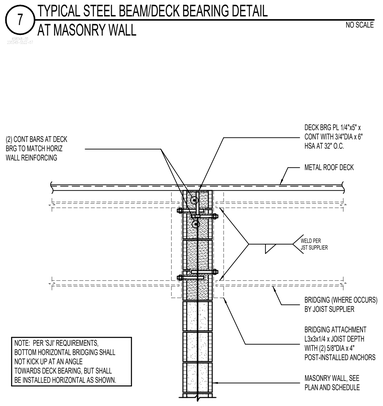
10 OFFSET DETAIL AT MASONRY WALL — NO SCALE



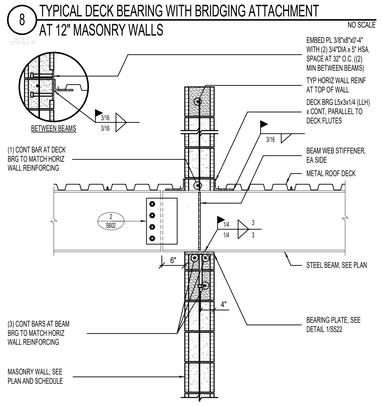
11 TYPICAL DECK BEARING WITH BRIDGING ATTACHMENT AT 12" MASONRY WALLS — NO SCALE



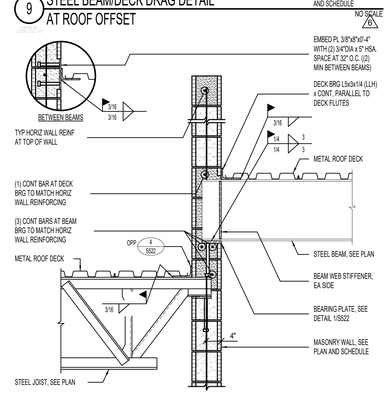
12 TYPICAL JOIST/DECK BEARING AT MASONRY WALL — NO SCALE



13 TYPICAL DECK BEARING AT MASONRY WALL WITH BRIDGING ATTACHMENT — NO SCALE

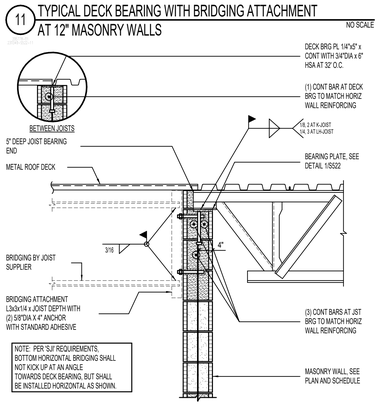


14 STEEL BEAM/DECK BEARING DETAIL AT MASONRY WALL — NO SCALE

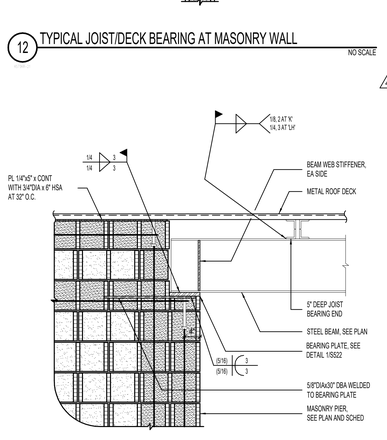


20 STEEL BEAM/JOIST BEARING AT MASONRY PIER — NO SCALE

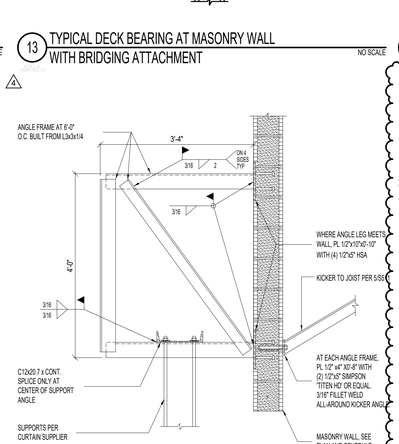
21 CONTINUOUS BEAM BEARING AT MASONRY WALL — NO SCALE



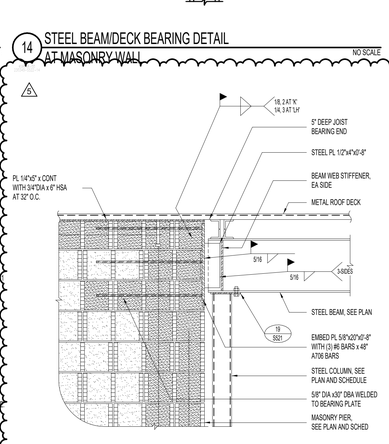
17 TYPICAL JOIST/DECK BEARING AT MASONRY WALL WITH BRIDGING ATTACHMENT — NO SCALE



18 STEEL BEAM/JOIST BEARING AT MASONRY PIER — NO SCALE



19 CURTAIN HANGING DETAIL — NO SCALE



16 TYPICAL JOIST/DECK BEARING AT MASONRY WALL — NO SCALE

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524 SOUTH 600 EAST
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VCBO.COM
VCBO NUMBER: 230349
DATE: (Issue Date)

LICENSED PROFESSIONAL STRUCTURAL ENGINEER
TRAVIS ROSS BRACKUS
10172207-2202
STATE OF UTAH
12/22/23

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
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bhb@bhbengineers.com

REV	DATE	DESCRIPTION
4	11-15-2023	CD Set
5	11-16-2023	Addendum 01
6	12-7-2023	ASI 03
7	12-20-2023	PR 01

OSD HILLCREST ELEMENTARY REBUILD

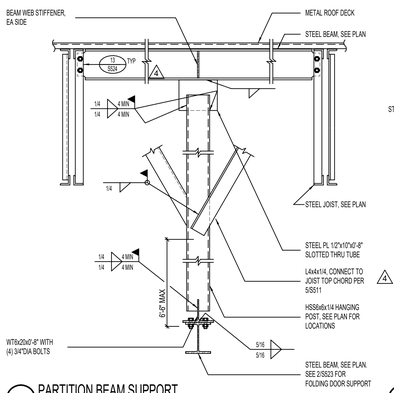
130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

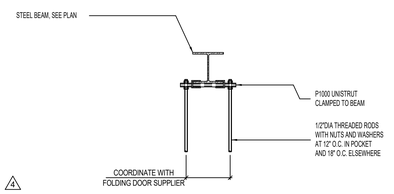
DETAILS

S522

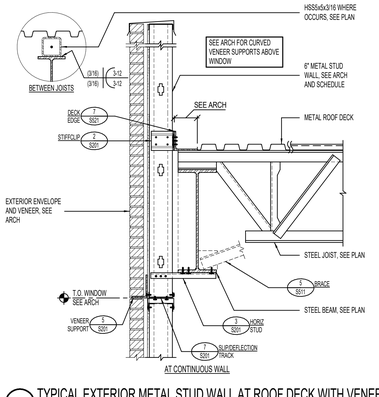
12/22/2023 2:00:33 PM



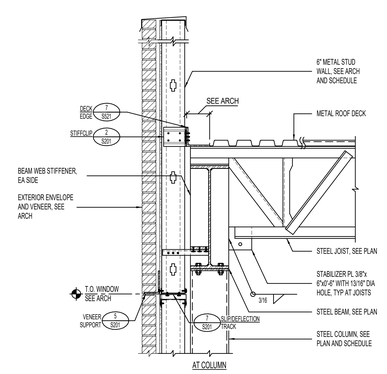
1 PARTITION BEAM SUPPORT — NO SCALE

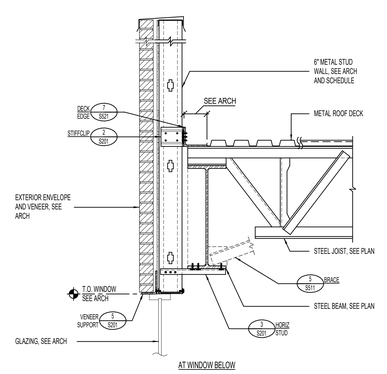


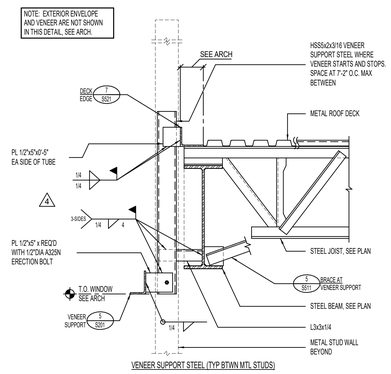
2 FOLDING DOOR SUPPORT DETAIL — NO SCALE



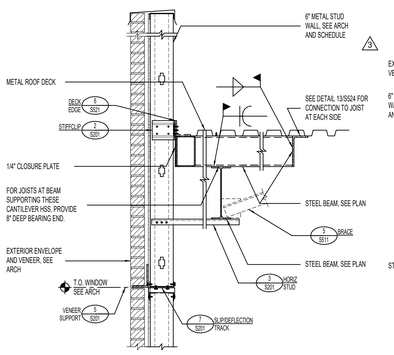
3 TYPICAL EXTERIOR METAL STUD WALL AT ROOF DECK WITH VENEER — NO SCALE

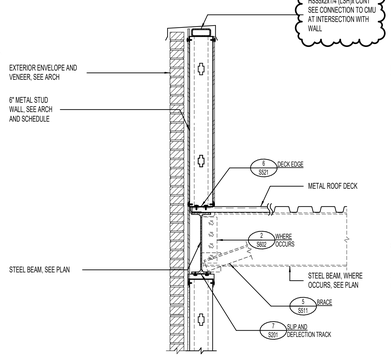


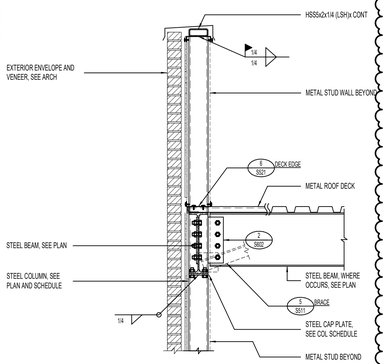


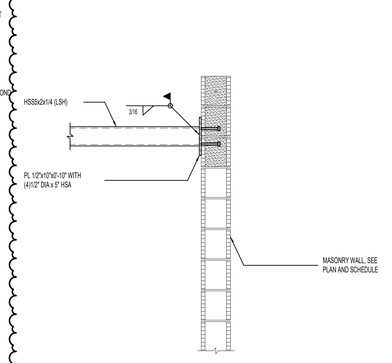


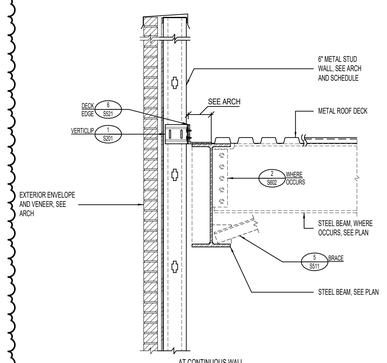
4 TYPICAL EXTERIOR METAL STUD WALL AT ROOF DECK WITH VENEER — NO SCALE

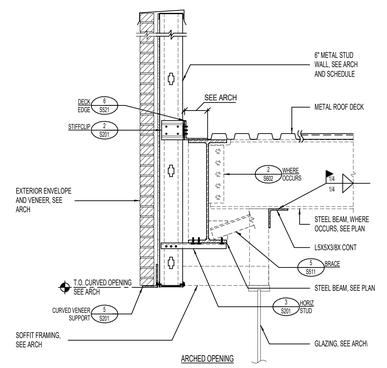




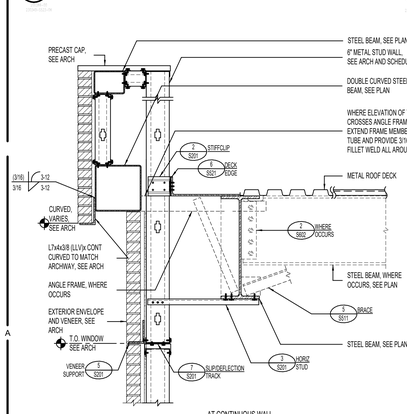




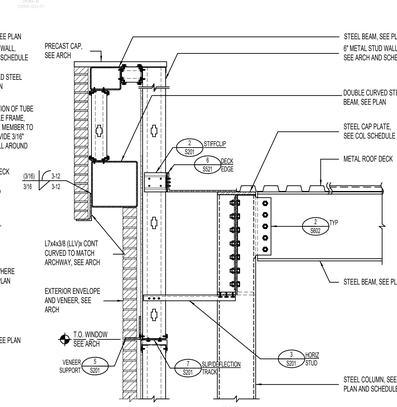


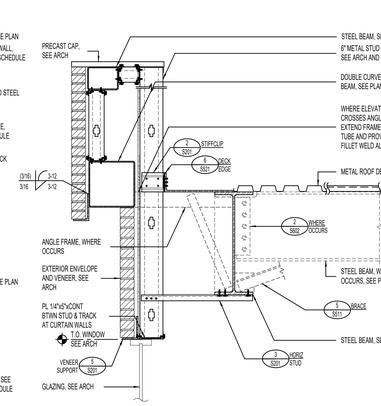


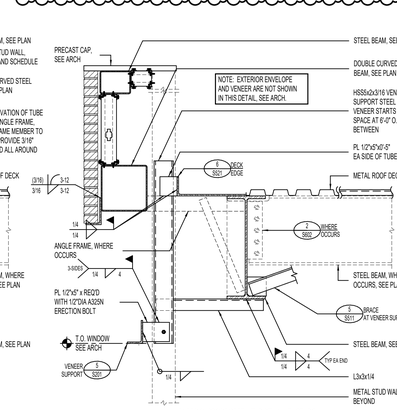
5 EXTERIOR METAL STUD WALL AT ROOF DECK WITH VENEER — NO SCALE



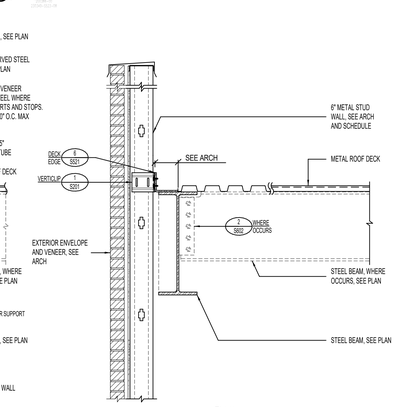
6 POPOUT AT ROOF — NO SCALE

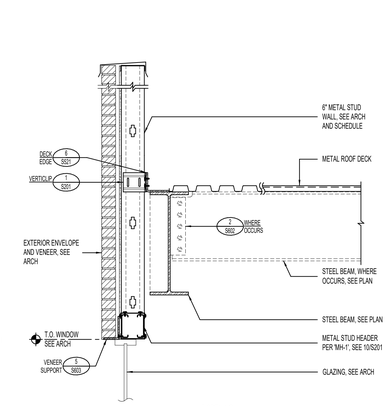






7 TYPICAL ROOF DECK EDGE AT EXTERIOR METAL STUD WALL WITH BRICK VENEER — NO SCALE





8 ROOF DETAIL — NO SCALE

9 ARCHED VENEER SUPPORT DETAIL — NO SCALE

10 EXTERIOR METAL STUDS AT ROOF DECK — NO SCALE

VCBO

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LAIE, HI

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PROFESSIONAL STRUCTURAL ENGINEER
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TRAVIS ROSS BRACKUS
STATE OF UTAH
11-16-23

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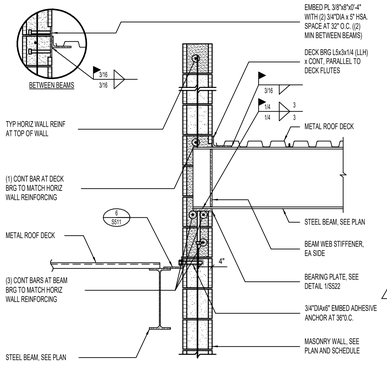
DETAILS

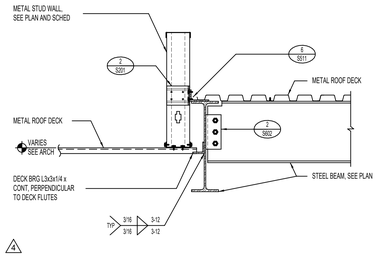
S523

11/16/2023 3:33:41 PM



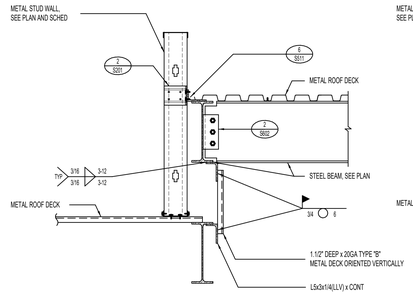
1 STEEL BEAM/DECK BEARING DETAIL AT ROOF OFFSET

NO SCALE



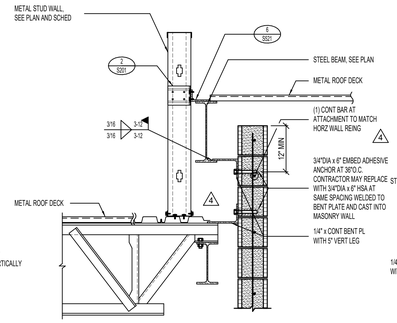
2 ROOF OFFSET DETAIL

NO SCALE



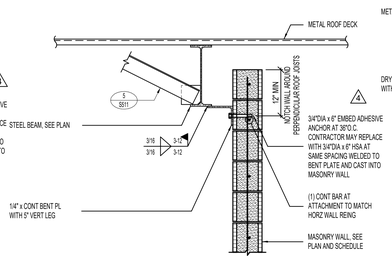
3 ROOF OFFSET DETAIL

NO SCALE



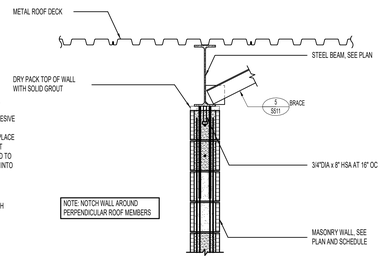
4 ROOF OFFSET DETAIL

NO SCALE



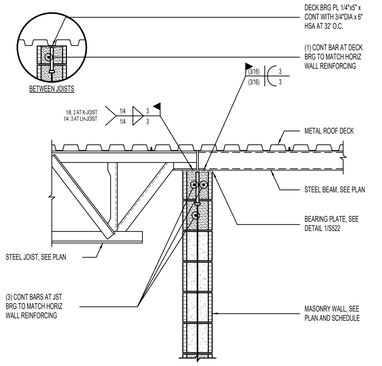
5 MASONRY INFILL DETAIL

NO SCALE



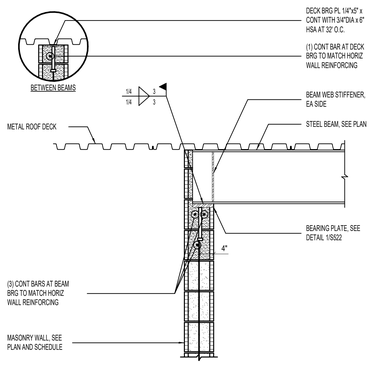
6 MASONRY INFILL WALL AT BEAM

NO SCALE



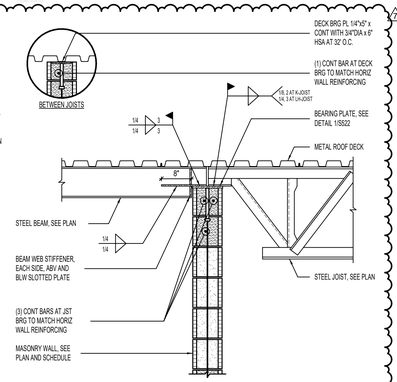
7 TYPICAL JOIST/BEAM BEARING AT MASONRY WALL

NO SCALE



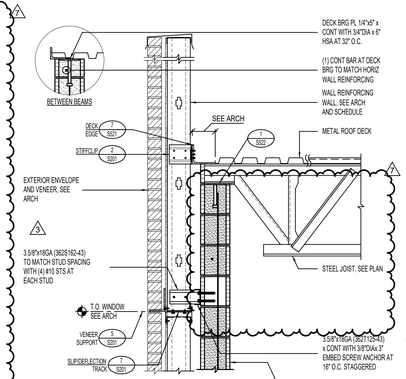
8 BEAM BEARING AT MASONRY WALL

NO SCALE



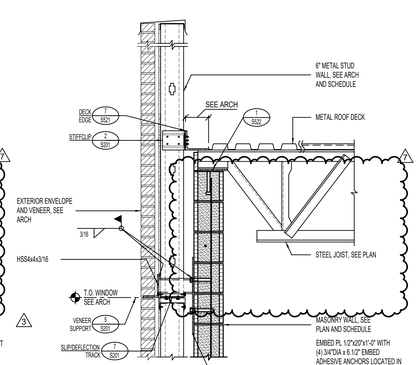
9 TYPICAL JOIST/BEAM BEARING AT MASONRY WALL

NO SCALE

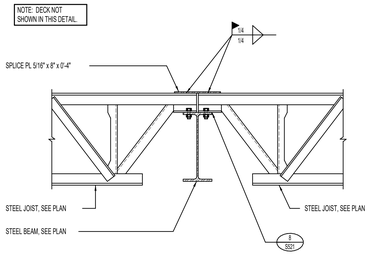


10 MASONRY INFILL DETAIL

NO SCALE

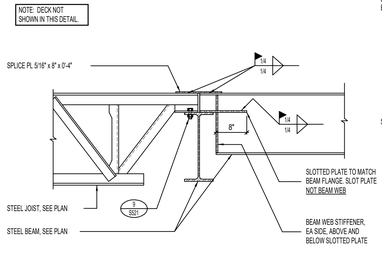


NO SCALE



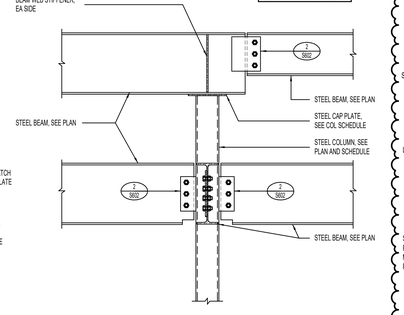
11 TYPICAL JOIST CHORD TIE/DRAG STRUT DETAIL

NO SCALE



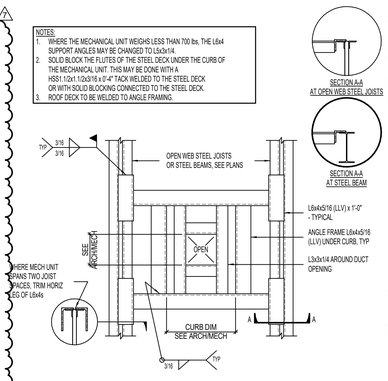
12 HI AND LOW COLUMN CONNECTION

NO SCALE



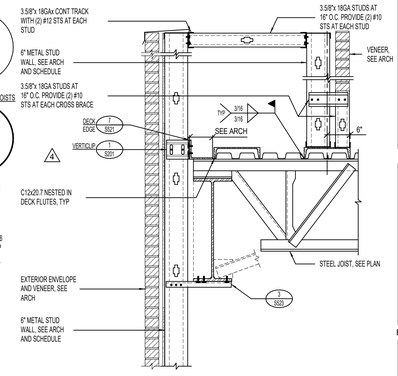
13 ANGLE TO JOIST CONNECTION FOR UPLIFT

NO SCALE



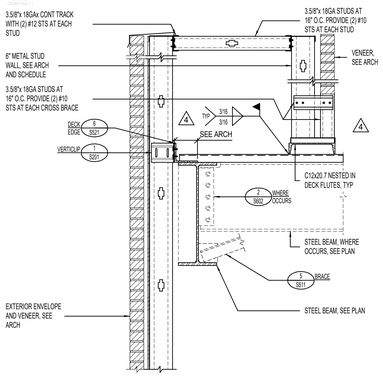
14 TYPICAL ROOF TOP MECHANICAL UNIT SUPPORT DETAIL [PLAN VIEW]

NO SCALE



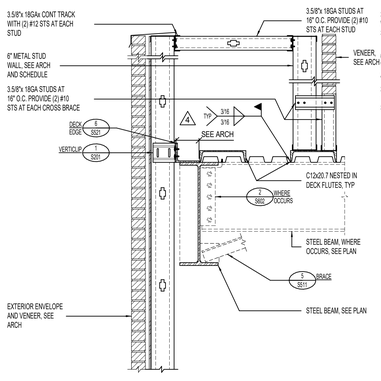
15 BRICK VENEER DETAIL

NO SCALE



16 BRICK VENEER DETAIL

NO SCALE



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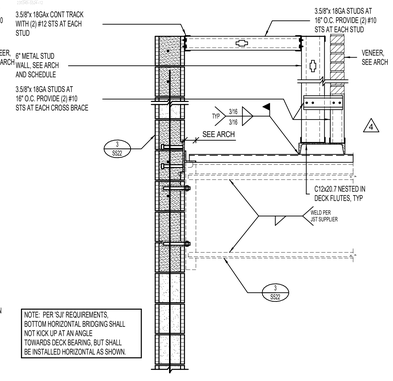
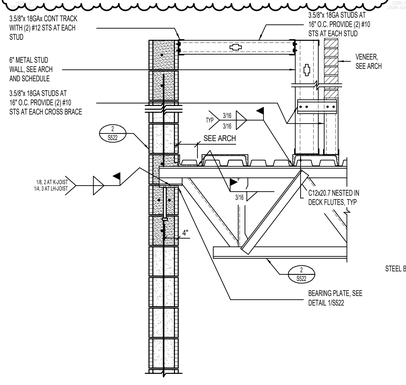


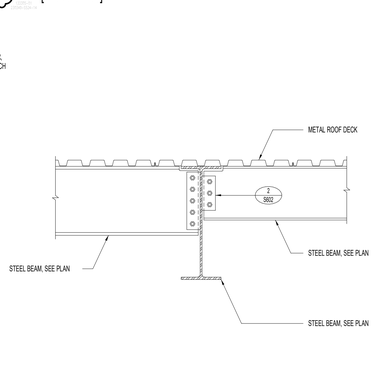
18 BRICK VENEER DETAIL

NO SCALE



19 BRICK VENEER DETAIL

NO SCALE



20 STEEL BEAM BEARING AT STEEL BEAM

NO SCALE

VCBO®

SALT LAKE CITY, UT - HQ
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LAIE, HI

524 SOUTH 600 EAST
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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

DETAILS

S524

12/22/2023 2:00:34 PM

CONCRETE CONTINUOUS FOOTING SCHEDULE (FC)

MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE No.	SIZE	LENGTH	SPACING	REINFORCING LENGTHWISE No.	SIZE	LENGTH	SPACING	COMMENTS
FC2.0	2'-0"	CONT	12"	-	#4	1'-6"	48"	3	#4	CONT	EQ	
FC2.5	2'-6"	CONT	12"	-	#5	2'-0"	14"	3	#5	CONT	EQ	
FC2.5A	2'-6"	CONT	12"	-	#5	2'-0"	14"	3	#5	CONT	EQ	REINFORCE TOP AND BOTTOM
FC3.0	3'-0"	CONT	12"	-	#5	2'-6"	14"	3	#5	CONT	EQ	
FC3.0A	3'-0"	CONT	12"	-	#5	2'-6"	14"	3	#5	CONT	EQ	REINFORCE TOP AND BOTTOM
FC4.0	4'-0"	CONT	12"	-	#5	3'-6"	14"	4	#5	CONT	EQ	
FC4.0A	4'-0"	CONT	12"	-	#5	3'-6"	12"	4	#5	CONT	EQ	REINFORCE TOP AND BOTTOM
FC7.5	7'-6"	CONT	17"	-	#6	7'-0"	12"	7	#6	CONT	EQ	
FC7.5A	7'-6"	CONT	17"	-	#6	7'-0"	12"	7	#6	CONT	EQ	REINFORCE TOP AND BOTTOM
FC8.5A	8'-6"	CONT	19"	-	#6	8'-0"	12"	8	#6	CONT	EQ	REINFORCE TOP AND BOTTOM
FC9.0A	9'-0"	CONT	21"	-	#6	8'-6"	12"	10	#6	CONT	EQ	REINFORCE TOP AND BOTTOM
FC9.5A	9'-6"	CONT	23"	-	#6	8'-10"	12"	10	#6	CONT	EQ	REINFORCE TOP AND BOTTOM
FC12.0A	12'-0"	CONT	25"	-	#8	11'-6"	12"	10	#8	CONT	EQ	REINFORCE TOP AND BOTTOM

CONCRETE THICKENED SLAB FOOTING SCHEDULE (FTS)

MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE No.	SIZE	LENGTH	SPACING	REINFORCING LENGTHWISE No.	SIZE	LENGTH	SPACING	COMMENTS
FTS2.0	2'-0"		12"	-	#4	1'-6"	48"	3	#4	CONT	EQ	

CONCRETE SPOT FOOTING SCHEDULE (FS)

MARK	WIDTH	Length	DEPTH	REINFORCING CROSSWISE No.	SIZE	LENGTH	SPACING	REINFORCING LENGTHWISE No.	SIZE	LENGTH	SPACING	COMMENTS
FS3.0	3'-0"	3'-0"	12"	3	#5	2'-6"	EQ	3	#5	2'-6"	EQ	
FS3.5	3'-6"	3'-6"	12"	3	#5	3'-0"	EQ	3	#5	3'-0"	EQ	
FS4.0	4'-0"	4'-0"	12"	4	#5	3'-6"	EQ	4	#5	3'-6"	EQ	
FS4.5	4'-6"	4'-6"	12"	4	#5	4'-0"	EQ	4	#5	4'-0"	EQ	
FS5.0	5'-0"	5'-0"	12"	5	#5	4'-6"	EQ	5	#5	4'-6"	EQ	
FS5.5	5'-6"	5'-6"	12"	5	#5	5'-0"	EQ	5	#5	5'-0"	EQ	
FS6.0	6'-0"	6'-0"	13"	6	#5	5'-6"	EQ	6	#5	5'-6"	EQ	
FS6.5	6'-6"	6'-6"	14"	7	#5	6'-0"	EQ	7	#5	6'-0"	EQ	
FS7.0	7'-0"	7'-0"	15"	8	#5	6'-6"	EQ	8	#5	6'-6"	EQ	
FS8.0	8'-0"	8'-0"	16"	8	#6	7'-6"	EQ	8	#6	7'-6"	EQ	

CONCRETE FOOTING NOTES:
1. PLACE ALL FOOTING REINFORCING IN THE BOTTOM OF THE FOOTING WITH 3" CLEAR CONCRETE COVER (UNO).
2. TOP REINFORCING, WHERE OCCURS, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" MINIMUM CONCRETE COVER.
3. IF FOOTINGS ARE EARTH-FORMED, FOOTINGS SHALL BE 6" LONGER AND WIDER THAN SCHEDULED.
4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
5. SOME SCHEDULED FOOTINGS MAY NOT BE USED, SEE FOOTING AND FOUNDATION PLAN FOR FOOTING MARKS.

1 CONCRETE FOOTING SCHEDULE (C3000-S2500)
1/2" = 1'-0"

CONCRETE WALL SCHEDULES

MARK	THICKNESS	REINFORCING VERTICAL	HORIZONTAL	TOP AND BOTTOM	WALL TYPE	COMMENTS
CW-8A	8"	#4 AT 32" OC	#4 AT 16" OC	(1) #4	A	<varies>
CW-8B	8"	#4 AT 18" O.C.	#4 AT 16" OC	(1) #4	A	
CW-8C	8"	#4 AT 12" O.C.	#4 AT 16" OC	(1) #4	A	
CW-8D	8"	#4 AT 24" O.C.	#4 AT 16" OC	(1) #4	A	
CW-8E	8"	#5 AT 12" O.C. I.F.	#4 AT 18" O.C.	(1) #4	B	INSIDE FACE = SOIL SIDE
CW-10A	10"	#5 AT 24" O.C.	#5 AT 15" O.C.	(1) #4	A	<varies>
CW-11A	11"	#4 AT 18" OC E.F.	#5 AT 13" OC E.F.	(1) #5	C	
CW-12A	12"	#4 AT 18" O.C. E.F.	#4 AT 16" O.C. E.F.	(2) #4	C	
CW-15A	15"	#4 AT 18" O.C. E.F.	#4 AT 16" O.C. E.F.	(2) #4	C	<varies>
CW-22A	22"	#4 AT 18" O.C. E.F.	#4 AT 16" O.C. E.F.	(2) #4	C	
CW-25A	25"	#4 AT 12" O.C. E.F.	#5 AT 12" O.C. E.F.	(2) #5	C	

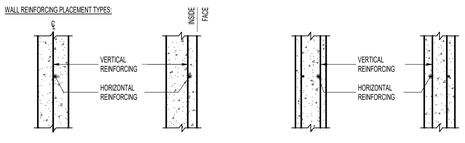
CONCRETE FOUNDATION WALL NOTES:
1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

ABBREVIATIONS:
EACH FACE E.F.
INSIDE FACE I.F.
OUTSIDE FACE O.F.

WALLS NOT DESIGNATED IN PLAN

THICKNESS	REINFORCING VERTICAL	HORIZONTAL
6"	#4 BARS AT 18" O.C.	#4 BARS AT 16" O.C.
8"	#4 BARS AT 18" O.C.	#4 BARS AT 12" O.C.
10"	#4 BARS AT 16" O.C.	#5 BARS AT 15" O.C.
12"	#4 BARS AT 18" O.C. E.F.	#4 BARS AT 16" O.C. E.F.

WALL REINFORCING PLACEMENT TYPES:



TYPE 'A' TYPE 'B' TYPE 'C' TYPE 'D'

2 CONCRETE WALL SCHEDULE
3/4" = 1'-0"

CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE

BAR SIZE	f'c = 3000psi & f'c = 3500 psi REGULAR CLASS A	REGULAR CLASS B	TOP CLASS A	TOP CLASS B	f'c = 4000psi & f'c = 4500 psi REGULAR CLASS A	REGULAR CLASS B	TOP CLASS A	TOP CLASS B	f'c = 5000psi REGULAR CLASS A	REGULAR CLASS B	TOP CLASS A	TOP CLASS B	f'c = 6000psi REGULAR CLASS A	REGULAR CLASS B	TOP CLASS A	TOP CLASS B
#3	17"	22"	22"	28"	15"	19"	19"	24"	13"	17"	17"	22"	12"	16"	15"	20"
#4	22"	29"	29"	37"	19"	25"	25"	32"	17"	22"	22"	29"	16"	20"	20"	27"
#5	28"	36"	36"	47"	24"	31"	31"	40"	22"	28"	28"	36"	20"	26"	26"	33"
#6	33"	43"	43"	56"	29"	37"	37"	48"	26"	33"	33"	43"	24"	31"	31"	40"
#7	48"	63"	63"	81"	42"	54"	54"	70"	37"	49"	49"	63"	34"	44"	44"	58"
#8	55"	72"	72"	93"	48"	62"	62"	80"	43"	56"	55"	72"	39"	51"	51"	66"
#9	62"	81"	81"	105"	54"	70"	70"	91"	48"	63"	63"	81"	44"	57"	57"	74"
#10	70"	91"	91"	118"	61"	79"	79"	102"	54"	70"	70"	91"	50"	64"	64"	83"
#11	78"	101"	101"	131"	67"	87"	87"	113"	60"	78"	78"	101"	55"	71"	71"	93"

TABULATED VALUES ARE FOR CASE 1 REINFORCEMENT, WHERE THE REQUIREMENTS OF TABLE BELOW ARE MET. WHERE THESE CONDITIONS ARE NOT MET, MULTIPLY THE LAP LENGTHS (*) BY 1.5.

REQUIREMENT FOR CASE 1 LAP LENGTHS

db = BAR DIAMETER

BAR CLEAR SPACING	CLEAR COVER	STIRRUPS OR TIES
>=db	>=db	>=CODE FOR MINIMUM THROUGHOUT *d
>=2db	>=db	NO REQUIREMENT

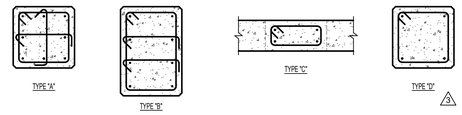
CONCRETE REINFORCING BAR LAP SPLICE NOTES:
1. THIS SCHEDULE SHALL BE USED FOR ALL BAR SPLICES IN CONCRETE WALLS, UNLESS NOTED OTHERWISE.
2. CLASS 'A' SPLICES MAY BE USED ONLY IN CASES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPLICE LENGTH.
3. CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE No. 2 ABOVE ARE MET.
4. TIES AND STIRRUPS SHALL NOT BE SPLICED.
5. DO NOT SPLICE VERTICAL BARS IN RETAINING WALLS UNLESS SPECIFICALLY SHOWN.
6. THE VALUES TABULATED IN SCHEDULE ARE FOR GRADE 60 REINFORCING BARS. FOR GRADE 75, MULTIPLY LAP LENGTHS BY 1.25 AND FOR GRADE 80, MULTIPLY BY 1.33.
7. THE VALUES TABULATED IN SCHEDULE ARE MINIMUM REQUIREMENTS. LONGER LENGTHS MAY BE USED FOR CONSTRUCTIBILITY.
8. LAP SPLICES ARE NOT ALLOWED FOR BARS GREATER THAN #11 BAR. THE LENGTHS IN SCHEDULE ARE FOR TENSION DEVELOPMENT LENGTH.
9. TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12". OR MORE. OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR.
10. FOR EPOXY-COATED OR ZINC AND EPOXY DUAL-COATED BARS WITH CLEAR COVER < 3db OR CLEAR SPACING <6db , MULTIPLY LAP LENGTHS BY 1.5. FOR ALL OTHER CASES MULTIPLY BY 1.2
11. FOR LIGHT WEIGHT CONCRETE, MULTIPLY LAP LENGTHS BY 1.33 UNLESS THE AVERAGE SPLITING TENSILE STRENGTH (Fct) IS SPECIFIED. FOR LIGHT WEIGHT CONCRETE WHERE Fct IS SPECIFIED, REFER TO ACI318-14 SECTION 19.2.4.3
12. SPLICES FOR BUNDLED BARS:
    A. FOR BUNDLED BARS OF THREE OR LESS, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.2.
    B. FOR BUNDLED BARS OF FOUR OR MORE, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.33.
    C. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
    D. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
13. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

3 CONCRETE REINFORCING 01
3/4" = 1'-0"

CONCRETE PIER SCHEDULE

MARK	PIER SIZE W x L	REINFORCING VERTICAL	TIES	TYPE	COMMENTS
CP-16A	18" x 16"	(4) #6	#3 AT 8" O.C.	C	
CP-16B	11" x 16"	(4) #5	#3 AT 8" O.C.	C	
CP-16C	8" x 16"	(4) #5	#3 AT 8" O.C.	C	
CP-16x32A	32" x 16"	(8) #6	#3 AT 8" O.C.	B	
CP-18A	18" x 18"	(8) #5	#3 AT 8" O.C.	A	
CP-18B	7 5/8" x 18"	(4) #5	#3 AT 8" O.C.	C	
CP-18B	18" x 18"	(4) #5	#3 AT 8" O.C.	C	
CP-18C	11" x 18"	(4) #5	#3 AT 8" O.C.	C	
CP-18x30A	18" x 30"	(8) #6	#3 AT 8" O.C.	B	
CP-24A	18" x 24"	(8) #5	#3 AT 8" O.C.	A	

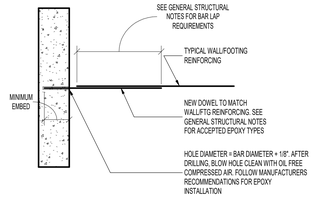
CONCRETE PIER NOTES:
1. INSTALL (3) SETS OF TIES WITHIN TOP 5" OF ALL PIERS (UNO).
2. RUN HORIZONTAL CONCRETE WALL REINFORCING CONTINUOUS THROUGH PIER WHEN PIER IS POURED MONOLITHICALLY WITH CONCRETE WALL.
3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



TYPE 'A' TYPE 'B' TYPE 'C' TYPE 'D' 3

4 CONCRETE PIER SCHEDULE
3/4" = 1'-0"

EPOXY DOWEL EMBED SCHEDULE	
Dowel Size	Min Embedment Into Existing Concrete
#4	6 1/2"
#5	7 1/2"
#6	10"
#7	1'-1"
#8	1'-4"



5 EPOXY DOWEL EMBED SCHEDULE
3/4" = 1'-0"

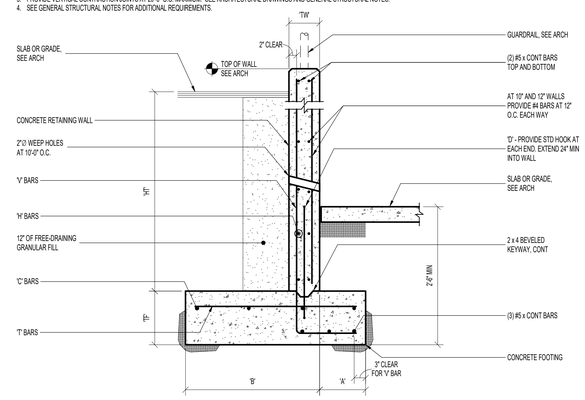
CRW FOOTING

MARK	DIMS A	B	TF

CONCRETE RETAINING WALL SCHEDULE

HT	TW	V SIZE	V SPACE	H SIZE	H SPACE	T SIZE	T SPACE	C SIZE	C SPACE	D SIZE	D SPACE	COMMENTS

CONCRETE RETAINING WALL NOTES:
1. "V" BARS SHALL NOT BE SPLICED BELOW MID-HEIGHT OF WALL.
2. WHERE 'HT' IS GREATER THAN 9'-0", THEN ONE HALF OF THE 'V' BARS MAY BE DISCONTINUED AT MID-HEIGHT OF WALL.
3. PROVIDE VERTICAL CONTRACTION JOINTS AT 20'-0" O.C. MAXIMUM. SEE ARCHITECTURAL DRAWINGS AND GENERAL STRUCTURAL NOTES.
4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



6 CONCRETE RETAINING WALL SCHEDULE
3/4" = 1'-0"

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SALT LAKE CITY, UT 84102
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DATE: (Issue Date)

PROFESSIONAL STRUCTURAL ENGINEER
No. 9072017-2203
TRAVIS ROSS BRACKUS
STATE OF UTAH
11-8-23

BHB STRUCTURAL
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Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

REV	DATE	DESCRIPTION
1	08-25-2023	ADDENDUM 1
3	10-5-2023	ASI 01
4	11-1-2023	CD Set

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

SCHEDULES

S601

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STEEL COLUMN SCHEDULE

MARK / LEVEL / TOS ELEVATION	SC-3A	SC-3B	SC-4A	SC-4B	SC-5A	SC-5B	SC-5C	SC-5D	SC-5E	SC-5F	SC-5G	SC-5H	SC-5I	SC-5J	SC-5K	SC-5L	SC-5M	SC-5N	SC-5O	SC-5P	SC-6A	SC-12A
CAP PLATE (TYPE)	1/2" (3)	SEE DETAIL 9/SS11	1/2" (2)	1/2" (2)	1/2" (1)	1/2" (1)	1/2" (1)	1/2" (2)	1/2" (1)	1/2" (2)	1/2" (2)	1/2" (1)	1/2" (1)	1/2" (1)	1/2" (2)	1/2" (1)	1/2" (2)	1/2" (2)	1/2" (2)	1/2" (3)	1/2" (2)	3/8" (3)
ROOF SEE ARCH		HSS3-1/2x3/8						HSS5x5x1/4														
1st FLOOR SEE ARCH	HSS3x3x1/4		HSS4x4x3/8	HSS4x4x1/4	HSS5x5x1/4	HSS5x5x1/2	HSS5x5x1/4		HSS5x5x1/4	HSS5x5x1/4	HSS5x5x1/4	HSS5x5x1/2	HSS5x5x1/2	HSS5x5x1/4	HSS5x5x1/4	HSS5x5x1/2	HSS5x5x1/2	HSS5x5x1/4	HSS5x5x1/4	HSS5x5x1/2	HSS5x5x5/16	HSS7.5x5x3/8
FOOTING SEE ARCH																						
BASE PLATE (TYPE)	1/2" (B)	1/4" COVER	3/4" (B)	3/4" (A)	7/8" (B)	1" (A)	7/8" (B)	7/8" (B)	7/8" (C)	7/8" (C)	7/8" (C)	1-1/8" (B)	1-1/8" (C)	7/8" (A)	7/8" (B)	1" (A)	1" (A)	7/8" (B)	7/8" (B)	3/4" (B)	3/4" (B)	3/4" (B)
ANCHOR RODS	(4) 3/4"DIA	NONE	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA	(4) 3/4"DIA

STEEL COLUMN NOTES:
1. PROJECT ANCHOR RODS 3" MINIMUM ABOVE TOP OF THE BASE PLATE. TYPICAL ANCHOR ROD EMBEDMENT INTO FOOTING SHALL BE 9" MINIMUM, WITH HOOKS (UNO). ALL ANCHOR RODS SHALL BE INSTALLED WITH HARDENED WASHERS BENEATH THE NUT. ANY HOLES LARGER THAN THE BOLT DIAMETER PLUS 5/16" SHALL HAVE 5/16" PLATE WASHERS INSTALLED BENEATH THE HARDENED WASHERS.
2. ANCHOR RODS SHALL NOT BE WELDED (INCLUDING TACK WELDS).
3. REFER TO DETAILS BELOW FOR ANCHOR ROD PATTERN.
4. ALL CAP PLATE BOLTS SHALL BE 3/4"DIA A325N BOLTS, TYPICAL UNLESS NOTED OTHERWISE.
5. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

STEEL BASE PLATE TYPES:

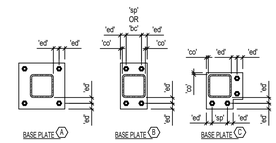
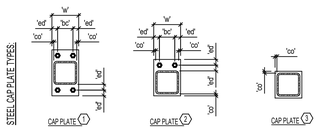


PLATE LEGEND
co = 1/2" MINIMUM
ed = 1.1/2" MINIMUM
sp = 3" MINIMUM
bc = BEAM OR GIRDER GAGE
w = BEAM OR GIRDER GAGE + 3"
OR
BEAM OR GIRDER WIDTH + 1"
OR
COLUMN WIDTH + 1"
WHICHEVER IS GREATER

STEEL CAP PLATE TYPES:



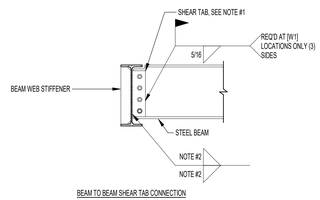
1 STEEL COLUMN SCHEDULE

NO SCALE

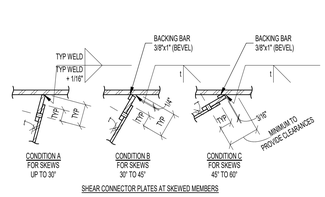
A-325 BOLT SCHEDULE

MAXIMUM BEAM SIZE IN EACH BEAM DEPTH GROUP	A-325N BOLTS			
	No. PER BEAM	SIZE	ASD CAPACITY	SEISMIC AXIAL CAPACITY
W8	2	7/8"DIA	15.54K	10K
W10	2	7/8"DIA	20.5K	9K
W12	3	7/8"DIA	23K	22K
W14	3	7/8"DIA	34.4K	18K
W16	4	7/8"DIA	46.3K	30K
W18	5	7/8"DIA	58.7K	56K
W21	6	7/8"DIA	70.8K	92K
W24	7	7/8"DIA	83.0K	120K
W27	8	7/8"DIA	95.1K	176K
W30	9	7/8"DIA	107.1K	198K

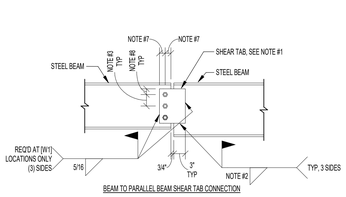
1. SHEAR TAB SHALL BE 1/2" THICK AT STEEL BEAMS LABELED WITH 'SRE' ON PLAN. INCREASE THICKNESS OF SHEAR TAB TO 3/4" AND ALL BOLTS SHALL BE PRETENSIONED WITH CLASS A FAYING SURFACES
2. 5/16" FILLET WELD EACH SIDE OF SHEAR TAB.
3. BOLT SPACING SHALL BE 3" MIN, TYP. REDUCE BOLT SPACING TO 2.7/8 WHERE NEEDED TO FIT THE REQUIRED QUANTITY OF BOLTS.
4. WHEN MORE THAN ONE ROW OF BOLTS IS NEEDED, THE FIRST ROW SHALL BE A COMPLETE ROW WITH THE REMAINDER OF THE BOLTS PLACED IN THE SECOND ROW WITH (3) BOLTS MIN AT SECOND ROW.
5. HSS COLUMN THAT DO NOT HAVE A MINIMUM 1/4" WALL THICKNESS SHALL USE A SINGLE ANGLE CONNECTION WHERE STEEL TUBE WALL IS TOO THIN.
6. BOLT EDGE DISTANCE, Leh SHALL BE EQUAL TO TWICE THE BOLT DIAMETER FOR BOTH THE PLATE AND THE BEAM WEB.
7. BOLT EDGE DISTANCE, Lev SHALL BE 1.1/4" FOR BOLT DIAMETERS 7/8" OR LESS AND 1.3/4xBOLT DIAMETER FOR BOLT DIAMETERS GREATER THAN 7/8".
8. ANGLE SIZE SHALL BE 3" FOR SHORT LEG AND 4 TIMES THE BOLT DIAMETER + 1" FOR THE LONG LEG.
9. AT STEEL BEAMS LABELED WITH 'SRE' ON PLAN THAT FRAME INTO HSS COLUMNS, THE SHEAR TAB SHALL RUN CONTINUOUSLY THROUGH A SLOT IN THE COLUMN



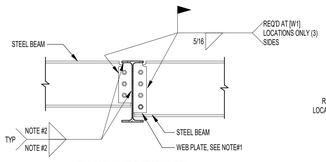
BEAM TO BEAM SHEAR TAB CONNECTION



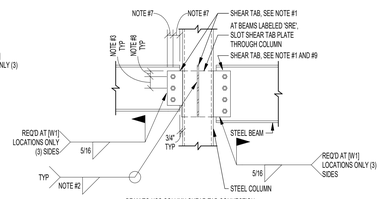
SHEAR CONNECTOR PLATES AT SKEWED MEMBERS



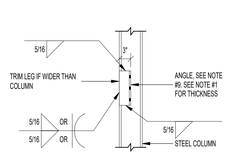
BEAM TO PARALLEL BEAM SHEAR TAB CONNECTION



BEAM TO BEAM WEB PLATE CONNECTION



BEAM TO HSS COLUMN SHEAR TAB CONNECTION



SINGLE ANGLE CONNECTION WHERE REQUIRED BY NOTE No. 5

2 TYPICAL 7/8" DIA BOLTED WEB PLATE CONNECTIONS WITH BOLT SCHEDULE1

[1\S121.1]

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PROFESSIONAL STRUCTURAL ENGINEER
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12-7-23

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bhb@bhbengineers.com

REV	DATE	DESCRIPTION
3	10-5-2023	ASI 01
6	12-7-2023	ASI 03.

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130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

SCHEDULES

S602

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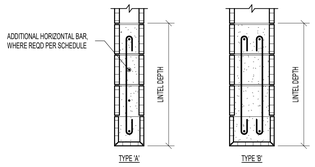
MASONRY LINTEL SCHEDULE NEW

MARK	LINTEL DEPTH	REINFORCING		TYPE	COMMENTS
		HORIZONTAL	STIRRUPS		
ML-16A	16"	(1) #5 T&B	NONE	A	
ML-24A	24"	(1) #6 T&B	#4 AT 8" O.C.	A	
ML-32A	32"	(1) #5 T&B	#4 AT 8" O.C.	A	
ML-32B	32"	(1) #6 T&B	#4 AT 8" O.C.	A	
ML-104A	104"	(1) #7 T&B	#4 AT 16" O.C.	A	
ML-104B	104"	(2) #7 T&B	#4 AT 24" O.C.	B	

MASONRY LINTEL NOTES:
1. LINTEL WIDTH AND MATERIAL TYPE SHALL BE THE SAME AS THE WALL IN WHICH THE LINTEL IS CONSTRUCTED.
2. GROUT MASONRY LINTELS MONOLITHICALLY WITH THE SUPPORT WALL OR PIER AT EACH END.
3. MASONRY LINTEL ML-8A, SHALL BE USED OVER OPENINGS IN MASONRY WALLS WHEN A SPECIFIC MASONRY LINTEL IS NOT OTHERWISE SPECIFIED. WHEN A LINTEL IS SPECIFIED ON THE PLANS, THE MAXIMUM SPAN AS NOTED IN THIS SCHEDULE SHALL NOT APPLY. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SPECIFIED ON THE PLANS WHICH HAVE A SPAN GREATERTHAN 5'-4".
4. MASONRY LINTEL ML-8A SHALL NOT BE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS UNLESS NOTED OTHERWISE ON THE PLANS. JOISTS SHALL NOT BEAR ON ANY LINTEL LESS THAN 16" DEEP. CONSULT THE STRUCTURAL ENGINEER FOR LINTELS NOT SHOWN ON THE PLANS WHICH ARE LOCATED DIRECTLY BELOW FLOOR OR ROOF BEAMS OR GIRDERS.
5. EXTEND ALL HORIZONTAL REINFORCING 48 BAR DIAMETERS MINIMUM BEYOND THE EDGE OF ALL OPENINGS. IF HORIZONTAL REINFORCING CANNOT EXTEND 48 BAR DIAMETERS BEYOND EDGE OF OPENING, PROVIDE 90° STANDARD HOOK.
6. SPLICE TOP BARS AT MIDSPAN OF LINTEL ONLY AND BOTTOM BARS OVER SUPPORTS ONLY.
7. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.
8. DOWEL VERTICAL REINFORCING OF WALL ABOVE LINTEL INTO THE FULL DEPTH OF LINTEL OR 48 BAR DIAMETERS, WHICHEVER IS LESS.
9. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



TYPE 'A' TYPE 'B'

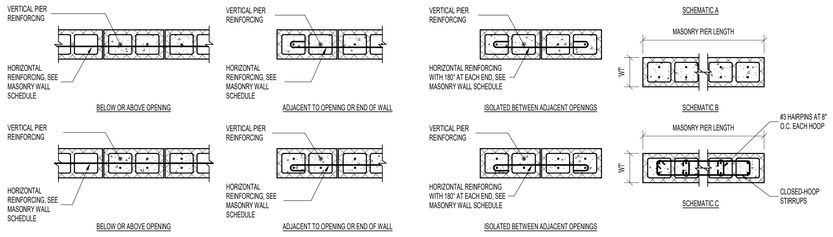
1 MASONRY LINTEL SCHEDULE
3/4" = 1'-0"

MASONRY PIER SCHEDULE

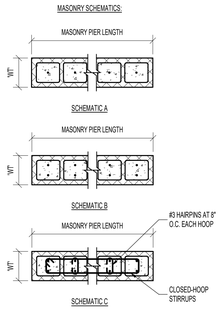
MARK	PIER SIZE 'WT' x	L	VERTICAL REINFORCING	TYPE	COMMENTS
MP-16A		16"	(2) #5	A	<varies>
MP-16B		16"	(2) #5 E.F.	B	
MP-16C		16"	(2) #4 E.F.	B	
MP-24A		24"	(3) #5	A	
MP-24B		24"	(3) #5 E.F.	B	
MP-32A		32"	(4) #5	A	
MP-32B		32"	(8) #5 E.F.	B	
MP-40A		40"	(5) #5	A	
MP-40B		40"	(2) #4 E.F.	B	
MP-72C		72"	(9) #5 E.F.	B	PROVIDE #3 CLOSED STIRRUPS AT 16" O.C.

MASONRY PIER NOTES:
1. SEE MASONRY WALL SCHEDULE FOR HORIZONTAL REINFORCING REQUIREMENTS FOR ALL PIERS.
2. VERTICAL REINFORCING AND TIES SHALL EXTEND FULL HEIGHT OF WALL (UNO).
3. VERTICAL MASONRY PIER REINFORCING SHALL EXTEND INTO THE FOOTING AND TERMINATE WITH A STANDARD 90° HOOK. FOR CONCRETE FOUNDATION WALLS 4'-0" OR TALLER, VERTICAL PIER REINFORCING SHALL DOWEL 3'-0" MINIMUM INTO THE FOUNDATION WALL (UNO).
4. IN CONCRETE FOUNDATION WALLS, VERTICAL REINFORCING AT TYPE 'B' MASONRY PIERS SHALL BE TIED WITH #3 TIES AT TOP AND BOTTOM OF FOUNDATION WALL SEE DETAILS.
5. HORIZONTAL REINFORCING OF ADJACENT WALLS SHALL RUN CONTINUOUS THROUGH MASONRY PIERS.
6. WHERE HORIZONTAL REINFORCING TERMINATES AT PIER, PROVIDE 180° HOOK, SEE SCHEMATICS BELOW.
7. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

TYPE A PIER CONFIGURATION SCHEMATICS



MASONRY SCHEMATICS:



2 MASONRY PIER SCHEDULE
3/4" = 1'-0"

MASONRY REINFORCING LAP SPLICE SCHEDULE

BAR SIZE	8" MASONRY		10" MASONRY		12" MASONRY	
	(1) BAR PER CELL	(2) BARS PER CELL	(1) BAR PER CELL	(2) BARS PER CELL	(1) BAR PER CELL	(2) BARS PER CELL
#3	12"	12"	12"	12"	12"	12"
#4	13"	21"	12"	20"	12"	20"
#5	20"	35"	16"	32"	13"	32"
#6	38"	SEE NOTE 1	29"	60"	24"	60"
#7	52"	SEE NOTE 1	40"	SEE NOTE 1	33"	63"
#8	SEE NOTE 1	SEE NOTE 1	61"	SEE NOTE 1	50"	SEE NOTE 1

2018 IBC

NOTES:
1. WHERE INDICATED, USE MECHANICAL SPLICE COUPLER. SEE GSN FOR REQUIREMENTS.
2. WHERE VERTICAL BARS HAVE A SPECIFIED LAP SPLICE GREATER THAN THE HEIGHT OF THE GROUT POUR, USE MECHANICAL SPLICE COUPLER.

3 MASONRY REINFORCING LAP SPLICE SCHEDULE (f'm=2000psi)
3/4" = 1'-0"

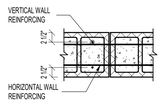
MASONRY WALL SCHEDULES

MARK	THICKNESS	MATERIAL	SOLID GROUT	TYPICAL REINFORCING (SEE NOTE 1)		COMMENTS
				VERTICAL	HORIZONTAL	
MW-8A	8"	SEE ARCH	Yes	#5 AT 32" O.C.	#4 AT 24" O.C.	<varies>
MW-8B	8"	SEE ARCH	Yes	#5 AT 24" O.C.	#4 AT 24" O.C.	
MW-10A	10"	SEE ARCH	Yes	#5 AT 24" O.C.	#5 AT 24" O.C.	<varies>
MW-12A	12"	SEE ARCH	Yes	(2) #5 AT 24" O.C.	(2) #4 AT 24" O.C.	

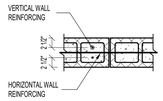
MASONRY WALLS NOT DESIGNATED IN PLAN

THICKNESS	REINFORCING		
	VERTICAL	HORIZONTAL (NOT SOLID GROUTED)	HORIZONTAL (SOLID GROUTED)
6"	#5 AT 32" O.C.	#4 AT 48" O.C.	#4 AT 24" O.C.
8"	#5 AT 32" O.C.	#5 AT 48" O.C.	#4 AT 24" O.C.
10"	#5 AT 24" O.C.	#6 AT 48" O.C.	#5 AT 24" O.C.
12"	#5 AT 24" O.C.	(2) #5 AT 48" O.C.	(2) #4 AT 24" O.C.

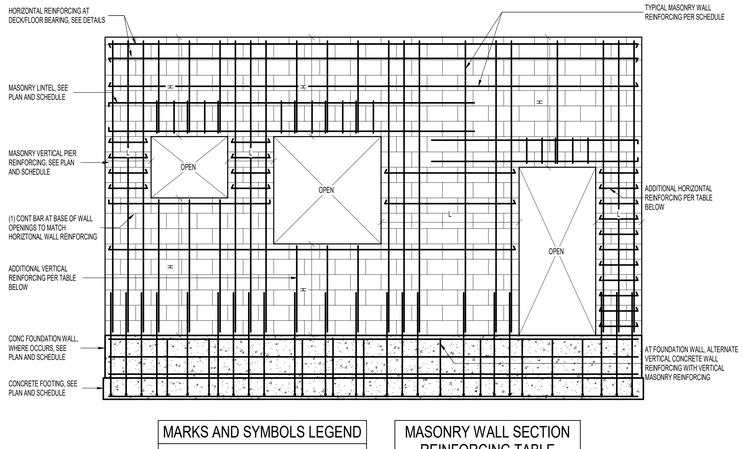
MASONRY WALL NOTES:
1. SPACING OF MASONRY WALL REINFORCING SHALL NOT EXCEED TYPICAL SCHEDULED REINFORCING. SEE ELEVATION AND MASONRY WALL SECTION REINFORCING TABLE BELOW FOR LOCATIONS WHERE TIGHTER SPACING IS REQUIRED.
2. COORDINATE WALL FINISHES, MATERIALS, COURSING, ETC. WITH ARCHITECTURAL DRAWINGS.
3. DO NOT SOLID GROUT WALLS UNLESS REQUIRED BY SCHEDULE, NOTES, OR DETAILS.
4. SOLID GROUT ALL MASONRY COURSES BELOW GRADE.
5. SINGLE LAYER OF VERTICAL REINFORCING SHALL BE CENTERED IN WALL (UNO).
6. VERTICAL REINFORCING SHALL EXTEND INTO FOOTINGS AND TERMINATE WITH STANDARD HOOK. FOR CONCRETE FOUNDATION WALLS 4'-0" OR TALLER, VERTICAL WALL REINFORCING SHALL DOWEL 3'-0" MINIMUM INTO THE FOUNDATION WALL (UNO).
7. PROVIDE TWO VERTICAL BARS (MIN) AT ALL CORNERS AND END OF WALLS.
8. HORIZONTAL WALL REINFORCING SHALL BE PLACED BETWEEN DOUBLE LAYER OF VERTICAL MASONRY REINFORCING, WHERE OCCURS.
9. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL WALL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.
10. SEE DETAIL 12/S501 FOR WHERE HORIZONTAL REINFORCING TERMINATES AT EDGE OF OPENINGS.
11. IN CONCRETE FOUNDATION WALL BELOW, ALTERNATE VERTICAL CONCRETE WALL REINFORCING WITH VERTICAL MASONRY REINFORCING.
12. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



DOUBLE VERTICAL LAYER WALL REINFORCING AT 12" MASONRY



DOUBLE VERTICAL LAYER WALL REINFORCING AT 8" AND 10" MASONRY



4 MASONRY WALL SCHEDULE
3/4" = 1'-0"

MARKS AND SYMBOLS LEGEND

———	INDICATES SCHEDULED MASONRY WALL, PIER, OR LINTEL REINFORCING
- - - -	INDICATES ADDITIONAL REINFORCING AS REQUIRED PER MASONRY WALL SECTION REINFORCING TABLE
L	INDICATES LENGTH OF WALL SECTION
H	INDICATES HEIGHT OF WALL SECTION

MASONRY WALL SECTION REINFORCING TABLE

HEIGHT OR LENGTH	MAXIMUM SPACING
H OR L ≤ 4'-0"	8" O.C.
4'-0" < H OR L ≤ 6'-0"	16" O.C.
6'-0" < H OR L ≤ 8'-0"	24" O.C.
8'-0" < H OR L ≤ 10'-0"	32" O.C.
10'-0" < H OR L ≤ 12'-0"	40" O.C.
H OR L > 12'-0"	48" O.C.

NOTES:
1. ADDITIONAL VERTICAL AND HORIZONTAL REINFORCING SHALL MATCH BAR SIZE OF SCHEDULED WALL REINFORCING AT SPACING INDICATED IN TABLE ABOVE.
2. WHERE 8" SPACING IS REQUIRED, #3 BAR MAY BE USED FOR HORIZONTAL REINFORCING.
3. WHERE SPACING OF SCHEDULED WALL REINFORCING IS LESS THAN TABLE ABOVE, SCHEDULED SPACING SHALL GOVERN.

VENEER LINTEL SCHEDULE

CLEAR OPENING	SIZE OF ANGLE
UP TO 5'-0"	L3 1/2x3x1/4 (LLH)
5'-1" TO 7'-0"	L3 1/2x3.1/2x1/4
7'-1" TO 9'-0"	L5x3.1/2x1/4 (LLV)
9'-1" TO 10'-0"	L5x3.1/2x5/16 (LLV)
10'-1" TO 11'-0"	L5x3.1/2x3/8 (LLV)
11'-1" TO 12'-0"	L6x4x3/8 (LLV)
12'-1" AND OVER	REQUIRES SPECIAL ANALYSIS

NOTE:
LINTELS CARRY VENEER ONLY WHERE FLOORS, ROOFS, OR CONCENTRATED LOADS OCCUR. FURTHER ANALYSIS IS NECESSARY. PROVIDE 1" OF BEARING AT EACH END FOR EACH FOOT OF SPAN. MINIMUM BEARING OF 8" EACH SIDE OF OPENING. USE THIS SCHEDULE UNLESS NOTED OTHERWISE. STEEL ANGLES SHALL BE GALVANIZED AT EXTERIOR CONDITIONS.

5 VENEER LINTEL SCHEDULE
3/4" = 1'-0"

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PROFESSIONAL STRUCTURAL ENGINEER
No. 9072017-2203
TRAVIS ROSS BRACKUS
STATE OF UTAH
11-8-23

BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhbengineers.com

REV	DATE	DESCRIPTION
4	11-1-2023	CD Set

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

CD SET

SCHEDULES

S603

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ABBREVIATIONS INDEX

ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION
#	NUMBER	MH	MANHOLE
A.F.F.	ABOVE FINISH FLOOR	MIN	MINIMUM
AMP	AMPERE	MTG	MOUNTING
ANN	ANNUNCIATOR	N/A	NOT APPLICABLE
AUX	AUXILIARY	NC	NORMALLY CLOSED
AWG	AMERICAN WIRE GAUGE	NEC	NATIONAL ELECTRICAL CODE
BC	BARE COPPER	NEMA	NATIONAL ELECT. MANUFAC. ASSOC.
BFG	BELOW FINISH GRADE	NFC	NATIONAL FIRE CODE
C	CONDUIT	NFPA	NATIONAL FIRE PROTECTION ASSOC.
CAB	CABINET	N.I.C.	NOT IN CONTRACT
CATB	COMMUNITY ANTENNA TELEVISION	NO	NORMALLY OPENED
CATV	CABLE TELEVISION	NTS	NOT TO SCALE
CLG	CEILING	PB	PUSHBUTTON
CNTR	CONTRACTOR	PNL	PANEL
C.O.	CONDUIT ONLY	PVC	POLYVINYL CHLORIDE CONDUIT
CRT	COMPUTER TERMINAL	(R)	RELOCATE
CU	COPPER	RECEP	RECEPTACLE
C/W	COMPLETE WITH	REQ	REQUIREMENT
DB	DECIBEL	SE	SERVICE ENTRANCE
DC	DIRECT CURRENT	SPEC	SPECIFICATIONS
DWG	DRAWING	SWBD	SWITCHBOARD
(E)	EXISTING	SWGR	SWITCHGEAR
EC	EMPTY CONDUIT	TTB	TELEPHONE TERMINAL BOARD
EMT	ELECTRICAL METALLIC TUBING	TTC	TELEPHONE TERMINAL CABINET
EX	EXPLOSION PROOF	TV	TELEVISION
FACP	FIRE ALARM CONTROL PANEL	TYP	TYPICAL
FT	FOOT	UG	UNDERGROUND
GND	GROUND	UP	UTAH POWER
GRC	GALVANIZED RIGID CONDUIT	UPS	UNINTERRUPTED POWER SUPPLY
HZ	HERTZ	V	VOLT (KV-KILOVOLT)
IMC	INTERMEDIATE METALLIC CONDUIT	W	WATTS
IN	INCH	W/	WITH
J-BOX	JUNCTION BOX	W/O	WITHOUT
KV	KILOVOLT	WP	WEATHERPROOF
KVA	KILOVOLT AMPERES	XFMR	TRANSFORMER
KVAR	KILOVARS	XP	EXPLOSION PROOF
KW	KILOWATT	1P	SINGLE-PHASE
LTG	LIGHTING	2P	TWO-POLE
MNF	MANUFACTURER	3P	THREE-POLE
MATV	MASTER ANTENNA TELEVISION	4P	FOUR-POLE
MAX	MAXIMUM	∅	PHASE
MB	MAIN BUS		

AUDIOVISUAL SHEET INDEX

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T113.1	LEVEL 01 - AUDIOVISUAL RCP - AREA 13
T114.1	LEVEL 01 - AUDIOVISUAL RCP - AREA 14
T121.1	LEVEL 02 - AUDIOVISUAL RCP - AREA 21
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T111.2	LEVEL 01 - AUDIOVISUAL FP - AREA 11
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T402	AUDIOVISUAL DIAGRAMS

CABLING GROUPS AND CONDUIT SEPARATION SCHEDULE

AUDIO AND VIDEO WIRING TYPES:

AUDIO AND VIDEO SYSTEM WIRING IS DIVIDED INTO WIRING GROUPS ACCORDING TO THEIR NOMINAL LEVELS:

GROUP	WIRING TYPE
GROUP 1	FIBER OPTIC CABLE
GROUP 2	O mV TO 100 mV SIGNALS, EXAMPLE: MICROPHONE LEVEL SIGNAL
GROUP 3	100 mV TO 10 V SIGNALS, EXAMPLE: LINE-LEVEL SIGNAL
GROUP 4	10 V TO 70 V SIGNALS, EXAMPLE: SPEAKER LEVEL SIGNAL
GROUP 5	CONTROL, DIGITAL CIRCUITS, DATA AND VIDEO

NOTE: GROUPS LISTED ABOVE SHALL NEVER BE COMBINED WITHIN THE SAME CONDUIT

AUDIO AND VIDEO CONDUIT SEPARATION

MINIMUM CONDUIT SEPARATION BETWEEN CONDUITS CARRYING WIRING OF DIFFERENT AUDIO AND VIDEO GROUPS IS AS FOLLOWS:

GROUP	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5
GROUP 1	ADJACENT	ADJACENT	ADJACENT	ADJACENT	ADJACENT
GROUP 2	ADJACENT	ADJACENT	6"	12"	12"
GROUP 3	ADJACENT	6"	ADJACENT	12"	6"
GROUP 4	ADJACENT	12"	12"	ADJACENT	6"
GROUP 5	ADJACENT	12"	6"	6"	ADJACENT

NOTE: NINETY DEGREE CROSSING IN CLOSE PROXIMITY IS PERMITTED.

ELECTRICAL CONDUIT SEPARATION

MINIMUM CONDUIT SEPARATION BETWEEN CONDUITS CARRYING AUDIO AND VIDEO WIRING AND OTHER ELECTRICAL SERVICE CONDUIT IS AS FOLLOWS:

	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5
277/480V AC CIRCUIT	ADJACENT	24"	24"	24"	24"
120/208V AC CIRCUIT	ADJACENT	24"	12"	12"	24"

NOTE: CONDUITS SHALL NOT RUN MORE THAN 20 FEET IN PARALLEL WITHIN THE GIVEN DISTANCES ABOVE.

AUDIOVISUAL CABLE AND CONDUIT SCHEDULE

NOTES:
1. APPROVED EQUALS FROM OTHER MANUFACTURERS ARE BELDEN, GEPCO/GENERAL, ICE, KRAMER, EXTRON, CRESTRON, LIBERTY CABLE, AND WINDY CITY WIRE.
2. PROVIDE PLENUM RATED CABLES IN ANY "AIR HANDLING" SPACES E.G. ABOVE CEILINGS, RAISED FLOORS, CHASES, ETC.
3. CABLE QUANTITY INDICATED ON DRAWINGS SHOWS ON FINAL RUN. IF NOT NOTED PROVIDE CABLING FOR SINGLE DEVICE
4. CONDUIT REQUIREMENTS SHOWN ARE MINIMUM CONDUIT SIZE REQUIRED FOR A SINGLE CABLE, UNLESS OTHERWISE NOTED ON DRAWINGS. NUMBER OF CABLES LISTED IS THE MAXIMUM AMOUNT ALLOWED FOR CONDUIT SIZE INDICATED.
5. WHEN COMBINING CABLE TYPES OF THE SAME GROUP, THE TYPE WITH THE LARGEST CONDUIT REQUIREMENT DICTATES CONDUIT SIZE.
6. PROVIDE ON ALL HDMI CABLES LONGER THAN 35' OR WITH MORE THAN (3) CONNECTION POINTS (1) ACTIVE HDMI EXTENSION DEVICE.
7. ALL CATEGORY CABLE SHALL BE TESTED AND CERTIFIED TO ANSI/TIA/EIA-568C AND IEEE 802.3an STANDARDS USING A LEVEL IIIe TESTER.
8. REFER TO SPECIFICATIONS FOR STP CABLE REQUIREMENTS. ALL UNSHIELDED (UTP) CATEGORY CABLES WITHIN THE PROJECT SHALL BE SUPPLIED FROM A SINGLE MANUFACTURER AND MATCH MAKE/MODEL.
9. HDMI CABLES ARE INTENDED TO PASS 4K 60 4:4:4 FROM SOURCE TO DESTINATION. CONTRACTOR TO VERIFY THE LENGTH OF ALL CABLES USED MEET THIS REQUIREMENT.

* INDICATES DEFAULT CABLE IF MANUFACTURER DOES NOT RECOMMEND A SPECIFIC CABLE.
** INDICATES DEFAULT CABLE IF HORIZONTAL CABLING IS EXCLUDED FROM THE PROJECT AND NOT OWNER PROVIDED.

CABLE TYPE	DESCRIPTION	CONDUIT REQUIREMENTS	MANUFACTURER	MODEL NUMBER	CABLE GROUP
(#)AT	ANTENNA, COAXIAL RG8X	1" CONDUIT = (7) CABLES 1 1/2" CONDUIT = (12) CABLES	WEST PENN	807 *	5
(#)CT	CONTROL, 2/22 SHIELDED, 2/18 UNSHIELDED	1" CONDUIT = (7) CABLES 1 1/4" CONDUIT = (12) CABLES	WEST PENN	77350 * D25350 (P) *	5
(#)HD	HDMI < 20', ULTRA FLEXIBLE	1 1/4" CONDUIT = (1) CABLES 2" CONDUIT = (3) CABLES	EXTRON CRESTRON	HDMI ULTRA/## CBL-HD-##	5
(#)HD	HDMI > 20'	1 1/4" CONDUIT = (1) CABLES 2" CONDUIT = (3) CABLES	EXTRON KRAMER	HDMI PRO P/XX CP-HMXHMETH (P)	5
(#)LA (#)MA	LINE LEVEL, 22 AWG MICROPHONE, 22 AWG	1" CONDUIT = (23) CABLES 1 1/2" CONDUIT = (77) CABLES	WEST PENN	291 D25454 (P)	3 2
(#)MFB	MULTIMODE FIBER OPTIC	1" CONDUIT MINIMUM	PER SPEC	27 1500	1
(#)RG6	RG-6 COAXIAL CABLE	1" CONDUIT = (8) CABLES 1 1/2" CONDUIT = (18) CABLES	WEST PENN	841 25841 (P)	5
(#)RG11	RG-11 COAXIAL CABLE	1" CONDUIT = (3) CABLES 1 1/4" CONDUIT = (6) CABLES	WEST PENN	821 D25821 (P)	5
(#)S12	SPEAKER, 12 AWG	1" CONDUIT = (3) CABLES 1 1/2" CONDUIT = (7) CABLES 2" CONDUIT = (11) CABLES	WEST PENN	227 25227B (P)	4
(#)S16	SPEAKER, 16 AWG	1" CONDUIT = (10) CABLES 1 1/4" CONDUIT = (17) CABLES	WEST PENN	225 25225B (P)	4
(#)SFB	SINGLE MODE FIBER OPTIC	1" CONDUIT MINIMUM	PER SPEC	27 1500	1
(#)STP	SHIELDED TWISTED PAIR, CAT 6A	1" CONDUIT = (4) CABLES 1 1/4" CONDUIT = (8) CABLES	PER MFG. WEST PENN	4246AF * 254246AF (P) *	5
(#)UTP	UN-SHIELDED TWISTED PAIR CAT 6	1" CONDUIT = (9) CABLES 1 1/4" CONDUIT = (15) CABLES	PER SPEC WEST PENN	4246 ** 254246 (P) ** SPEC 27 1500	5
(#)VG	HIGH RESOLUTION VIDEO	1" CONDUIT = (1) CABLES 1 1/4" CONDUIT = (4) CABLES	WEST PENN	5CRGB 255CRGB (P)	5
(#)SDI	SERIAL DIGITAL INTERFACE (RG-6 COAX)	1" CONDUIT = (8) CABLES 1 1/2" CONDUIT = (18) CABLES	WEST PENN	841 25841 (P)	5
(#)USB	USB EXTENSION CABLE	1" CONDUIT = (3) CABLES 1 1/4" CONDUIT = (10) CABLES	CABLES TO GO	52108	5
(#)X#	MANUFACTURER PROPRIETARY CABLE	AS NOTED	SPEC. 27 4100	SPEC. 27 4100	NA

AUDIOVISUAL GENERAL NOTES

1. THIS SHEET SET SHOWS WORK AND MATERIALS BY DIVISION 26 AND DIVISION 27. SEE SPECIFICATIONS AND DRAWING NOTES FOR RESPONSIBILITY FOR EACH ITEM.
2. ELECTRICAL CONTRACTOR SHALL COORDINATE REQUIRED PROVISIONS WITH THE PROJECT AV SYSTEMS INTEGRATOR PRIOR TO INSTALLATION OF AV SYSTEM ROUGH-IN. WHERE CONDUIT AND JUNCTION BOX PROVISIONS ARE SIGNIFICANTLY DIFFERENT FROM THOSE SHOWN ON THE DRAWINGS, NOTIFY THE AV CONSULTANT IN WRITING OF THE REQUIREMENTS. WHERE MINOR MODIFICATIONS TO PROVISIONS ARE REQUIRED, THEY SHALL BE MADE AT NO ADDITIONAL COST AS A MATTER OF JOB COORDINATION.
3. BIDDERS SHALL THOROUGHLY ACQUAINT AND EXAMINE THE EXISTING PROJECT CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. INCLUDING THE COMPLETE SET OF PLANS AND SPECIFICATIONS COVERING THE ENTIRE PROJECT. BIDDERS SHALL BECOME FULLY CONVERSANT WITH THE TYPE OF GENERAL CONSTRUCTION AS WELL AS ALL PERTINENT FACTS AFFECTING THE COST OF CARRYING OUT THE WORK THEY WILL CONTRACT TO PERFORM AND BRING ANY DISCREPANCIES OR OMISSIONS FOUND IN THE DRAWINGS TO THE AV CONSULTANT'S ATTENTION BEFORE SUBMITTING BID.
4. AV SYSTEMS INTEGRATOR SHALL PROVIDE A FULLY FUNCTIONING SYSTEM IN EVERY RESPECT. ANY DISCREPANCIES IN THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT AV CONSULTANT PRIOR TO BIDDING.
5. THE FOREGOING WORK SHALL BE COMPLETE IN EVERY RESPECT, AND ANY MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT NECESSARY TO FULLY COMPLETE THE WORK, SHALL BE FURNISHED BY THE PROJECT AV SYSTEMS INTEGRATOR.
6. NO CHANGES TO THE DESIGN SHALL BE MADE WITHOUT THE PROJECT AV CONSULTANT'S WRITTEN CONSENT.
7. WHERE APPLICABLE, AV SYSTEMS INTEGRATOR SHALL FOLLOW ALL MANUFACTURER'S INSTALLATION GUIDELINES.
8. REFER TO DRAWINGS FOR EXACT NUMBER OF COMPONENTS USED IF NOT SPECIFIED IN EQUIPMENT LIST.
9. COORDINATE EXACT SPEAKER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS. ANY CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT AV CONSULTANT PRIOR TO BIDDING.
10. CONFIRM AVAILABLE MOUNTING DEPTHS OF ALL SPEAKERS AND COMPARE WITH DEPTHS SHOWN ON SHOP DRAWINGS. BRING ALL POTENTIAL CONFLICT AREAS TO THE ATTENTION OF THE ARCHITECT AND AV CONSULTANT PRIOR TO RELEASE.
11. INSTALL/SUSPEND ALL AUDIOVISUAL SYSTEMS EQUIPMENT IN COMPLIANCE WITH SEISMIC CODES, MANUFACTURER'S WRITTEN INSTRUCTIONS, AND INDUSTRY BEST PRACTICES. DURING THE SUBMITTAL PROCESS, PROVIDE SHOP DRAWINGS WHICH DETAIL PROPOSED MOUNTING FOR ALL SUCH EQUIPMENT.
12. ALL TWISTED-PAIR (U/UTP, F/UTP, U/FTP, S/FTP) CATEGORY TYPE CABLING SHALL BE TERMINATED BY CERTIFIED DATA TECHNICIANS. TEST PER SPECIFICATIONS REQUIREMENTS AND PROVIDE DATA TO AV CONSULTANT.
13. ALL HDBaseT SIGNAL CABLING, TERMINATIONS, AND TERMINATION HARDWARE SHALL COMPLY WITH TIA/EIA WIRING CONFIGURATION T568 B. ALL HDBaseT SIGNAL CABLING SHALL BE SHIELDED/FOIL (SF/UTP) CATEGORY TYPE CABLE.
14. CONDUCT A RADIO FREQUENCY AUDIT OF THE SITE PRIOR TO SELECTING RF OPERATIONAL FREQUENCIES. AV SYSTEMS INTEGRATOR TO ENSURE INTERFERENCE FREE OPERATION OF ALL RF DEVICES. AV SYSTEMS INTEGRATOR SHALL COORDINATE AUDIT RESULTS WITH MANUFACTURER PRIOR TO PURCHASING RF EQUIPMENT.
15. PROVIDE RACK MOUNT KITS FOR ALL RACK MOUNTED EQUIPMENT. PROVIDE CUSTOM RACK MOUNT KITS WHEN NOT AVAILABLE FROM THE EQUIPMENT MANUFACTURER.
16. PROVIDE SURGE PROTECTION DEVICE (SPD) IN ALL AV EQUIPMENT RACKS.
17. ALL AV EQUIPMENT RACKS SHALL BE GROUNDED AND BONDED TO MEET OR EXCEED THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE (NED), IEC 1000-5-2 ANSI/J-STD-607-A.
18. ALL AV EQUIPMENT SHALL BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS.
19. PROVIDE MANUFACTURER RECOMMENDED POWER SUPPLIES OR TRANSFORMERS FOR ALL SPECIFIED EQUIPMENT.
20. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR LACK OF COORDINATION WITH AV CONSULTANT AS ADDRESSED IN THE DOCUMENTS
21. UNLESS SPECIFICALLY SPECIFIED OR NOTED PROVIDE COMMERCIAL QUALITY EQUIPMENT, MATERIALS AND COMPONENTS DESIGNED FOR CONTINUOUS USE. CONSUMER QUALITY COMPONENTS ARE NOT ACCEPTABLE.

CONDUIT SCHEDULE LEGEND:

CONDUIT SIZE CHART

A = 3/4" CONDUIT
B = 1" CONDUIT
C = 1-1/4" CONDUIT
D = 1-1/2" CONDUIT
E = 2" CONDUIT
F = 4" CONDUIT

ROUGH-IN JUNCTION BOX LEGEND:

JUNCTION BOX SIZE

A = 4" SQ. 2-1/8" DEEP JUNCTION BOX
B = 4-11/16" SQ. JUNCTION BOX
C = CUSTOM JUNCTION BOX SEE SCHEDULE FOR SIZE
D = HUBBELL - HBL260/HBL985

LOUDSPEAKER LEGEND:

LOUDSPEAKER TYPES

A = ARRAY, CABINET, CLUSTER
C = CEILING RECESSED
P = PENDANT MOUNTED
R = WALL RECESSED
S = CEILING SURFACE MOUNTED
W = WALL SURFACE MOUNTED

SYSTEM LOUDSPEAKER IDENTIFIER

BLANK = SYSTEM SPECIFIC
I = INTERCOM SYSTEM
SM = SOUND MASKING SYSTEM

FLAT PANEL MONITOR LEGEND:

MOUNT TYPES

CLG = CEILING (POLE) MOUNT
F = FLAT MOUNT
T = TILT MOUNT
R = RECESSED MOUNT
S = ARTICULATING MOUNT
H = ADJUSTABLE HEIGHT MOUNT*

MONITOR TYPES

D = TYPICAL COMMERCIAL GRADE
S = INTERACTIVE COMMERCIAL GRADE
V = VIDEO WALL (SLIM BEZEL)
L = DIRECT VIEW LED PRODUCT

* HEIGHT INDICATED IS THE MAX HEIGHT, MOUNT SHALL ADJUST DOWN

SIGNAL FLOW LEGEND:

NOTES:

* = REMOTE POWER

AUDIOVISUAL SYMBOL SCHEDULE

NOTES:
1. HEIGHT MEASURED TO BOTTOM OF THE DEVICE FROM FINISHED FLOOR.
2. HEIGHT MEASURED TO CENTER LINE OF THE DEVICE FROM THE FINISHED FLOOR.
3. REFER TO DIAGRAMS AND ELEVATIONS FOR CUSTOM ROUGH-IN REQUIREMENTS.
4. STANDARD MOUNTING HEIGHT UNLESS OTHERWISE NOTED ON PLANS.
5. ROUGH-IN TO BE HORIZONTAL.
6. ROUGH-IN TO BE INSTALLED ABOVE ACCESSIBLE CEILING.
7. ROUGH-IN TO BE INSTALLED ABOVE CEILING.
8. DEVICE IS TYPICALLY LOCATED IN MILLWORK, FURNITURE, BEHIND A MONITOR OR ABOVE A PROJECTOR.
9. ABOVE TABLE/COUNTER MOUNTED DEVICE.
10. REFER TO MANUFACTURER'S RECOMMENDED CABLE REQUIREMENTS FOR EXACT CABLE REQUIRED.
11. FOLLOW BICSI STANDARDS FOR CABLE ROUTING AND DISTANCES.
12. JUNCTION BOX INDICATED IS FOR MOST INSTALLATIONS. DEVICE WILL BE NOTED WHEN JUNCTION BOX SIZE REQUIREMENTS ARE DIFFERENT FROM INDICATED.
13. MOUNTING HEIGHT SHOWN IS FROM THE BOTTOM OF THE MONITOR TO THE FINISHED FLOOR

GENERAL SCHEDULE NOTES:

A. TYPICAL SYMBOL SCHEDULE. SOME SYMBOLS MAY NOT BE USED IN THIS SET OF DRAWINGS.
B. DEVICES WITH "A" ADJACENT TO IT INDICATE DEVICE TO BE COORDINATED WITH MILLWORK PRIOR TO ROUGH-IN.
C. ROUGH-IN JUNCTION BOX, CONDUIT AND MOUNTING HEIGHT ARE DEFAULT REQUIREMENTS. REFER TO PLANS FOR SPECIFIC NOTES AND REQUIREMENTS FOR A SPECIFIC INSTANCE.
D. CONDUIT STUBBED INTO ACCESSIBLE CEILING UNLESS OTHERWISE NOTED.
E. CABLE FROM DEVICE TO BE HOMERUN TO DESTINATION WITHOUT SPLICES.

SYMBOL	DESCRIPTION	J-BOX	CONDUIT	MOUNTING HEIGHT	CABLE TYPE	NOTES
M#	MICROPHONE INPUT, WALL PLATE (M1/M2 = D1, M3/M4 = D2)	D1,D2	(1) 3/4"	RECEPTACLE HEIGHT	(#) MA	2,4.
AX	AUXILIARY INPUT, 3.5MM/RCA CONNECTION, WALL PLATE	D1	(1) 3/4"	RECEPTACLE HEIGHT	(1) LA	2,4.
T TS	AUDIO OUTPUT, WALL PLATE, T = XLR MALE CONNECTION, TS = 1/4 TS CONNECTION	D1	(1) 3/4"	RECEPTACLE HEIGHT	(1) LA	2,4.
MA	MICROPHONE INPUT WITH AUXILIARY INPUT, WALL PLATE	D1	(1) 3/4"	RECEPTACLE HEIGHT	(1) MA (1) LA	2,4.
MC	MICROPHONE INPUT, CEILING	D1	(1) 3/4"	CEILING	(1) MA	2,4.
MB	TABLE TOP BOUNDARY MICROPHONE		(1) 1/2"	ON TABLE/ MILLWORK	(1) MA	2,3,9.
MW	WALL MOUNTED, PUSH TO TALK MICROPHONE	D1	(1) 3/4"	SWITCH HEIGHT	(1) MA	2,4.
MDT	DUAL MICROPHONE INPUT, WALL PLATE, UTP TRANSMITTER EXTENDER	D1	(1) 3/4"	RECEPTACLE HEIGHT	(1) UTP	2,4.
MAT	MICROPHONE AND AUXILIARY INPUT, WALL PLATE, UTP TRANSMITTER EXTENDER	D1	(1) 3/4"	RECEPTACLE HEIGHT	(1) UTP	2,4,11.
MXT	MICROPHONE AND AUXILIARY INPUT, WALL PLATE, UTP TRANSMITTER AUDIO ENCODER	D2	(1) 1"	RECEPTACLE HEIGHT	(1) UTP	2,4,11.
MT	DUAL MICROPHONE INPUT/OUTPUT WALL PLATE, UTP TRANSMITTER AUDIO ENCODER	D1	(1) 1"	RECEPTACLE HEIGHT	(1) UTP	2,4,11.
M2D	DUAL MICROPHONE INPUT/OUTPUT WALL PLATE, UTP TRANSMITTER AUDIO ENCODER	D2	(1) 1"	RECEPTACLE HEIGHT	(1) UTP	2,4,11.
M4D	FOUR MICROPHONE INPUT WALL PLATE, UTP TRANSMITTER AUDIO ENCODER	D2	(1) 1"	RECEPTACLE HEIGHT	(1) UTP	2,4,11.
AXT	BLUETOOTH AND AUXILIARY INPUT, WALL PLATE, UTP TRANSMITTER AUDIO ENCODER	D2	(1) 1"	SWITCH HEIGHT	(1) UTP	2,4,11.
CI	CREWCOM HEADSET INPUT, WALL PLATE	D1	(1) 3/4"	SWITCH HEIGHT	(1) MA	2,4.
CIS	CREWCOM WALL STATION, WALL PLATE	D3	(1) 3/4"	SWITCH HEIGHT	(1) MA	2,4.
BT	BLUETOOTH, WALL PLATE, AUDIO EXTENDER	D1	(1) 1"	SWITCH HEIGHT	(1) UTP	2,4,11.
VG	VGA INPUT, WALL PLATE	D1	(1) 1 1/4"	RECEPTACLE HEIGHT	(1) VG	2,4.
HD	HDMI INPUT, WALL PLATE	D1	(1) 1 1/4"	RECEPTACLE HEIGHT	(1) HD (1) LA	2,4.
HV	HDMI AND VGA INPUT, WALL PLATE	D2	(1) 1 1/4"	RECEPTACLE HEIGHT	(1) HD (1) VG	2,4.
EN#	AVoIP ENCODER, WALL PLATE (# IDENTIFIES UNIQUE PLATES)	SCH	(1) 1"		(1) UTP	2,4,11.
DC#	AVoIP DECODER, WALL PLATE (# IDENTIFIES UNIQUE PLATES)	SCH	(1) 1"		(1) UTP	2,4,11.
TxH	HDBaseT, HDMI INPUT TRANSMITTER, WALL PLATE	D1	(1) 1"	RECEPTACLE HEIGHT	(1) STP	2,4,11.
TxD	HDBaseT, HDMI AND VGA TRANSMITTER, WALL PLATE	D2	(1) 1"	RECEPTACLE HEIGHT	(1) STP	2,4,11.
TxM	HDBaseT, HDMI, DISPLAY PORT AND/OR VGA TRANSMITTER BOX, SURFACE MOUNTED			IN MILLWORK/ UNDER TABLE	(1) STP	2,4,11.
TxT	HDBaseT CATEGORY INPUT, WALL PLATE	D1	(1) 1"	RECEPTACLE HEIGHT	(1) STP	2,4,11.
RxH	HDBaseT, HDMI RECEIVER, WALL PLATE	D1	(1) 1"	AS NOTED	(1) STP	2,4,11.
US	USB INPUT, WALL PLATE, UTP EXTENSION	D1	(1) 1"	RECEPTACLE HEIGHT	(1) STP	2,4,11.
Rx	HDBaseT RECEIVER DEVICE, SURFACE MOUNTED		(1) 1"	IN MILLWORK/ UNDER TABLE	(1) STP	2,4,8,11.
CHV	HDMI AND VGA TRANSMITTER, WALL PLATE (CLASSROOM SYSTEM)	D2	(1) 1 1/4"	RECEPTACLE HEIGHT	(1) STP	2,4,11.
CHD	DUAL HDMI TRANSMITTER, WALL PLATE (CLASSROOM SYSTEM)	D2	(1) 1 1/4"	RECEPTACLE HEIGHT	(1) STP	2,4,11.
HDU	HDMI AND USB TRANSMITTER, WALL PLATE	SCH	(1) 1"	RECEPTACLE HEIGHT	(2) STP	2,4,11.
CAL	2-WAY INTERCOMMUNICATION PUSHBUTTON STATION	D1	(1) 3/4"	SWITCH HEIGHT	AS NOTED	2,7,10.
CSA	CLASSROOM SOUND AMPLIFICATION SYSTEM		(1) 1 1/4" (1) 1"	IN MILLWORK/ AS NOTED		2,3.
IR	INFRARED SENSOR, WALL/CEILING	D1	(1) 3/4"	CEILING	(1) UTP OR (1) CT	2,6,11.
ALS	ASSISTIVE LISTENING SYSTEM ANTENNA/EMITTER, WALL/CEILING	A1	(1) 1"	AS NOTED	AS NOTED	2,6.
AT	AV ANTENNA, WALL/CEILING	D1	(1) 1"	AS NOTED	(1) AT	2,6.
V	VOLUME CONTROL	D1	(1) 1"	SWITCH HEIGHT	(1) S16	2,4.
SV	VOLUME CONTROL WITH SOURCE SELECTOR	D2	(1) 1"	SWITCH HEIGHT	(1) S16 (1) UTP	2,4,9,11.
TPT	TOUCH PANEL, TABLE TOP		(1) 1"	AS NOTED	(1) UTP	
TP#	TOUCH PANEL, WALL MOUNTED, REFER TO SPECIFICATIONS FOR TOUCH PANEL TYPE AND ORIENTATION	SCH	(1) 1"	SWITCH HEIGHT	(1) UTP	2,4,5,11.
KP#	KEYPAD, WALL MOUNTED, REFER TO SPECIFICATIONS FOR KEYPAD TYPE	SCH	(1) 1"	SWITCH HEIGHT	(1) CT or (1) UTP	2,4,10.
RS#	ROOM SCHEDULING TOUCHPANEL	SCH	(1) 1"	SWITCH HEIGHT	(1) STP	
TB#	TABLE/FURNITURE BOX, NUMBER REFERS TO TYPE REFER TO SPECIFICATIONS/DIAGRAMS FOR REQUIREMENTS			IN MILLWORK	SEE DIAGRAMS.	
	LOUDSPEAKER, WALL MOUNTED	C#	(1) 3/4"	AS NOTED	(1) S16	2,4.
	LOUDSPEAKER, ARRAY, CABINET, CLUSTER	A0	(1) 3/4"	AS NOTED	(1) S12	2,4.
	LOUDSPEAKER, CEILING RECESSED OR PENDANT	C#	(1) 3/4"	CEILING	(1) S16	2,7.
SB#	SOUND BAR, REFER TO SPECIFICATIONS FOR TYPE	D1	(1) 1"	UNDER DISPLAY OR AS NOTED		1,5.
X##	DISPLAY, REFER TO SPECIFICATIONS FOR DISPLAY TYPE AND SIZE	PER SCH	(1) 1 1/4" (1) 1"	AS NOTED	AS NOTED	4,13.
SC#	PROJECTION SCREEN REFER TO SPECIFICATIONS FOR SCREEN TYPE AND SIZE	(2) A0	(1) 3/4"	CEILING OR WALL	(1) UTP	2,7.
P#	PROJECTOR	D2	(1) 1 1/4"	CEILING OR AS NOTED	AS NOTED	2,6.
	AV CAMERA	C#	(1) 1"	AS NOTED	AS NOTED	1.
	EQUIPMENT CABINET/RACK	C#	SCH	AS NOTED		
CLG	EQUIPMENT CEILING RACK	C#	SCH	AS NOTED		
	EQUIPMENT 2-POST CABINET/RACK	C#	SCH	AS NOTED		
GP#	PASS THROUGH PLATE, # = NUMBER OF GANGS	D#	(1) 1-1/2"	AS NOTED		2.
J	JUNCTION BOX, ABOVE ACCESSIBLE CEILING	A0	AS NOTED	AS NOTED		
C##	CUSTOM JUNCTION BOX, REFER TO SCHEDULE AND DIAGRAM FOR EQUIPMENT, JUNCTION BOX AND CONDUIT	SCH	SCH	AS NOTED	AS NOTED	
FB	FLOOR BOX - REFER TO ELECTRICAL DOCUMENTS FOR MAKE/MODEL - REFER TO DIAGRAMS FOR AV DEVICE LAYOUT		AS NOTED

AV PROJECTOR SCREEN SCHEDULE

TYPE	IMAGE SIZE (Ix) IN INCHES				BOTTOM OF IMAGE AFF	CASE DIMENSIONS (Cx) IN INCHES			WEIGHT	OPERATION	PROJECTION ORIENTATION	CONTROL TYPE	MOUNTING TYPE	NOTES
	DIAGONAL	HEIGHT	WIDTH	ASPECT RATIO	BLACK DROP LENGTH	LENGTH	WIDTH	DEPTH						
SC1	226	119 3/4"	203 5/8"	16:10	18"	18"	217 1/4"	7 1/4"	7 1/4"	260 LBS	MOTORIZED, 120V	REAT	AV SYSTEM, RELAY, RS-232	CEILING, RECESSED	LOCATE FACTORY WALL CONTROLLER IN EQUIPMENT RACK.

AV EQUIPMENT RACK SCHEDULE

TYPE	DIMENSIONS				JUNCTION BOX	MOUNTING TYPE	NOTES
	HEIGHT	WIDTH	DEPTH	RU's			
R1	82 7/8"	24"	30"	45	C02	FLOOR	

AV CUSTOM BACK BOX SCHEDULE

TYPE	MANUFACTURER	MODEL	BOX DIMENSIONS (Cx) IN INCHES			CONDUIT'S	MOUNTING TYPE	MOUNTING HEIGHT	NOTES
			HEIGHT	WIDTH	DEPTH				
C02	HOFFMAN	ASE NK SERIES	12"	14"	4"	(2) 2", (8) 1", (4) 3/4", (3) 1" SPARE	RECESSED	HORIZONTAL	RECESSED BEHIND EQUIPMENT RACK. ROUTE CONDUIT FROM DEVICES SHOWN ON PLANS TO THIS LOCATION. STUB (3) 1" CONDUITS TO ACCESSIBLE CEILING FOR FUTURE USE.
C10	WEIGMANN	WA-XXXXXXFM	16"	12"	6"	(1) 2", (3) 1"	RECESSED	HORIZONTAL	REFER TO SIGNAL FLOWS FOR DEVICE REQUIREMENTS WITHIN ENCLSOURE. SIZE SHOWN FOR REFERENCE ONLY. FIELD COORDINATE WITH EC AND AV CONTRACTORS PRIOR TO ORDERING.
CSA	HUBBELL	HBL260	12 3/16"	8 11/16"	3"	(2) 1"	RECESSED	HORIZONTAL	

AV LOUDSPEAKER SCHEDULE

TYPE	DIMENSIONS				SHAPE	WEIGHT	INSTALLATION	NOTES
	WIDTH (H)	WIDTH (V)	DIAMETER	DEPTH				
C1	12"	24"	12"	3"	SQUARE	4.7 LBS	RECESSED	
C4	12"	24"	12"	3"	SQUARE	4.7 LBS	RECESSED	
C6	0"	0"	12"	6"	ROUND	9.5 LBS	RECESSED	
P6	8 11/16"	12 1/8"	13 1/8"	1/4"	ROUND	13 LBS	PENDANT	
P10	8 11/16"	12 1/8"	13 1/8"	1/4"	ROUND	13 LBS	PENDANT	

AV FLAT PANEL MONITOR SCHEDULE

TYPE	IMAGE SIZE (Ix) IN INCHES			MONITOR DIMENSIONS (Cx) IN INCHES			WEIGHT	CONTROL TYPE	NOTES
	DIAGONAL	HEIGHT	WIDTH	HEIGHT	WIDTH	DEPTH			
D55	55	27 1/16"	47 15/16"	27 7/8"	48 5/8"	2 1/2"	31 LBS	RS-232, IP	<varies>
D60	60	29 9/16"	52 1/4"	30 5/16"	53"	2 1/2"	31 LBS	RS-232, IP	
D65	65	32"	56 5/8"	32 7/8"	57 5/16"	2 1/2"	60 LBS	RS-232, IP	
D75	75	36 15/16"	65 5/16"	37 7/8"	66 1/4"	2 1/2"	85 LBS	RS-232, IP	
S86	86	42 5/16"	74 15/16"	43 3/16"	75 13/16"	2 1/2"	103 LBS	RS-232, IP	

LOW VOLTAGE SCOPE OF WORK

NOTES:...

1. RESPONSIBILITY MATRIX DELINEATES THE SCOPE OF WORK BETWEEN THE OWNER AND THE CONTRACTORS. CONTRACTORS ARE RESPONSIBLE TO COORDINATE BETWEEN EACH OTHER FOR THE FULL SCOPE OF WORK THEY ARE RESPONSIBLE FOR.
2. ADDITIONAL NOTES MAY BE PRESENT WITHIN THE CONTRACT DOCUMENTS INDICATING SPECIFIC EQUIPMENT PROVIDED BY OTHERS OR REQUIRE INSTALLATION BY SPECIFIC DIVISIONS.
3. INSTALLER PROVIDING THE SYSTEM CABLING SHALL PROVIDE THE CABLING, TERMINATION AND CERTIFICATION FOR A COMPLETE SYSTEM INSTALLATION, UNLESS OTHERWISE SPECIFICALLY NOTED WITHIN THE CONTRACT DOCUMENTS.
4. INSTALLER TO VERIFY WITH CONTRACT DOCUMENTS FOR THE CONNECTION TYPE (MALE OR FEMALE) REQUIRED FOR EACH SYSTEM.
5. REFER TO DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

LEGEND

AC	ACCESS CONTROL CONTRACTOR
AV	AUDIOVISUAL CONTRACTOR
DC	DOOR HARDWARE CONTRACTOR
EC	ELECTRICAL CONTRACTOR
FR	FURNITURE CONTRACTOR
GC	GENERAL CONTRACTOR
IC	INTRUSTION DETECTION CONTRACTOR
LVC	TELEPHONE/DATA CABLING CONTRACTOR
NIC	NOT IN CONTRACT
OWNER	OWNER
SC	VIDEO SURVEILLANCE CONTRACTOR
SPEC	SEE SPECIFICATIONS

DESCRIPTION	FURNISHED BY	INSTALLED BY
GENERAL		
(UPS) UNINTERRUPTIBULE POWER SUPPLIES	OWNER	OWNER
EQUIPMENT POWER (120V,208V,240V,277V,480V,ETC)	EC	EC
ROUGH OR FINSHED TRIM , CASE WORK, MILLWORK,EQUIPMENT RACKS & CABINETS, PEDESTALS, STRUCTURAL WORK FOR SPECAIL CONSTRUCTION.	GC	GC
STRUCTURAL BACKING AND SUPPORT FOR WALL MOUNTING EQUIPMENT	GC	GC
SUPPORT CABLES, PRE-CONSTRUCTION KITS, TILE BRIDGES, MANUFACTURE BACK BOXES, RACEWAY/PATHWAY & CONDUIT ROUGH-IN WITH NYLON PULLING TWINE, JUNCTION BOXES, FLOOR/CEILING BACK BOXES, NYLON BUSHINGS, FIRE-STOPPING, ETC.	EC	EC
EQUIPMENT RACKS,WIRE MANAGEMENT,PATCH PANELS,NETWORK EQUIPMENT(SERVERS,PoE SWITHCHES,ROUTERS,ETC)WITHIN EF,ER,TR ROOMS	OWNER	OWNER
INSTALLATION OF CAT6 NETWORK CABLES AND FIBER OPTIC CABLES	LVC	LVC
SYSTEM PROGRAMMING ,TESTING AND TRANNING	AC / SC	AC / SC
TERMINATING AND TESTING CAT6 NETWORK AND FIBER CABLES	LVC	LVC
ACCESS CONTROL SYSTEM		
CREDENTIAL, CARD/BADGE PRINTER	OWNER	OWNER
ELECTRFIED DOOR LOCKING HARDWARE	DC	DC
INSTALLATION OF ACCESS CONTROL CABLING	AC	AC
ACCESS CONTROL OPERATING SOFTWARE	AC	AC
TERMINATING AND TESTING OF THE ACCESS CONTROL CABLES	AC	AC
ACCESS CONTROL SYSTEM HEAD-END CONTROL PANEL(S) AND POWER SUPPLY(S)	AC	AC
CREDENTIAL CARDS, FOBS, TAGS, MOBILE	OWNER	OWNER
END DEVICES (E.G. CREDENTIAL CARD READERS, DOOR POSITION SWITCHES, REQUEST TO EXIT MOTION, POWER TRASFER HINGE, DOOR RELEASE BUTTON, PANIC/DUIRESS BUTTON,PUSH TO EXIT BUTTON,ETC.)	AC	AC
INDIVIDUAL ACCESS CONTROL DOOR CONTROLLER(IF APPLICABLE)	AC	AC
OPERATING BASE STATION/WORK STATION EQUIPMENT (SERVER, MONITOR, KEYBOARD, MOUSE)	OWNER	OWNER
POWER SUPPLIES FOR ELECTRIFIED DOOR LOCKING HARDWARE	AC	AC
RECHARGABLE BACK-UP BATTERIES	AC	AC
AUDIOVISUAL		
ROUGH-IN - CONDUIT W/PULL STRING, JUNCTION BOXES, FLOOR BOXES, FLAT PANEL DISPLAY BACK BOXES, ETC.	EC	EC
SPECIALTY BACK BOXES, TILE BRIDGES, SUPPORT CABLES, PRECONSTRUCTION KITS, ETC. FOR AUDIOVISUAL COMPONENTS (TOUCH PANELS, LOUDSPEAKERS, KEYPADS, ETC.)	AV	AV
CATEGORY CABLE / FIBER OPTIC CABLE FROM DEVICE LOCATION TO TR(MDF)/ER(IDF) TERMINATED IN PATCH PANEL	LVC	LVC
CATEGORY CABLING FROM DEVICE TO DEVICE, NOT TERMINTATED IN PATCH PANELS WITHIN THE ER(MDF/TR(IDF)	AV	AV
COAXIAL CABLE	LVC	LVC
LIGHTING CONTROL SYSTEM INTERFACE DEVICE(S) AND CABLING TO AV CONTROL SYSTEM. TERMINATION INTO AV SYSTEM CONTROLLER BY AV INSTALLER	EC	EC
MOTORIZED SHADE CONTROL SYSTEM INTERFACE DEVICE(S) AND CABLING TO AV CONTROL SYSTEM. TERMINATION INTO AV SYSTEM	AV	AV
CUSTOM AUDIOVISUAL CONNECTOR INSERT PLATE FOR FLOOR BOXES AND/OR WALL PLATES	AV	AV
EQUIPMENT RACKS NOT WITHIN THE ER(MDF)/TR(IDF) FOR SYSTEM COMPONENTS	AV	AV
FURNITURE BOX TABLE CUTTING	GC	GC
FURNITURE BOXES WITH AUDIOVISUAL CONNECTIONS AND/OR CABLES	AV	AV
PROJECTOR SCREEN MANUAL AND/OR MOTORIZED HOUSING	AV	AV
PROJECTOR SCREEN MANUAL AND/OR MOTORIZED ROLLER	AV	AV
PROJECTOR SCREEN, FIXED FRAME (SIMILAR TO WHITEBOARD)	GC	GC
FLAT PANEL MONITOR MOUNTS	OWNER	AV
FLAT PANEL MONITORS	OWNER	AV
INSTRUCTOR'S LECTERNS/CONSOLES WITH INTEGRATED AUDIOVISUAL SYSTEMS COMPONENTS	AV	AV
INTERACTIVE FLAT PANEL MONITORS AND MOUNTS (WALL MOUNTED)	OWNER	AV
INTERACTIVE MOBILE CART ASSEMBLY	OWNER	OWNER
NETWORK SWITCHES WITHIN THE ER(MDF)/TR(IDF) FOR AUDIOVISUAL NETWORK, AUDIO, CONTROL AND VIDEO	OWNER	OWNER
VIDEO PROJECTOR	AV	AV
VIDEO PROJECTOR MOUNTS	AV	AV
INTRUSION DETECTION SYSTEM (BURGLAR ALARM)		
ANY INTRUSION DETECTION WIRELESS EQUIPMENT (TRANSMITTERS, RECEIVERS, REPEATERS, ETC.)	IC	IC
CELLULAR BACKUP COMMUNICATION DEVICE	IC	IC
END DEVICES (E.G. ; DOOR CONTACTS, GARAGE CONTACTS, ROOF HATCH CONTACTS, MOTION SENSORS, TEMPERATURE/MOISTURE/LEAK SENSORS, ETC.)	IC	IC
INTERIOR/EXTERIOR SIRENT AND/OR STROBES	IC	IC
INTRUSION DETECTION HEAD-END CONTROL PANEL AND SLAVE PANELS	IC	IC
INTRUSION DETECTION KEYPADS (ARM/DISARM)	IC	IC
INTRUSION DETECTION LOW VOLTAGE CABLING	IC	IC
RECHARGABLE BACK-UP BATTERIES	IC	IC
TERMINATING AND TESTING LOW VOLTAGE CABLES	IC	IC
TELEPHONE / DATA		
ROUGH-IN - CONDUIT W/PULL STRING, JUNCTION BOXES, FLOOR BOXES, FLAT PANEL DISPLAY BACK BOXES, ETC.	EC	EC
CATEGORY CABLE / FIBER OPTIC CABLE	LVC	LVC
PATCH CABLES FOR DEVICES WITHIN THE TR/ER FOR CONNECTION BETWEEN PATCH PANELS AND NETWORK SWITCHES	LVC	LVC
TERMINATE CABLE (PATCH PANEL AND DATA PORT), INCLUDING TESTING	OWNER	OWNER
CUSTOM TELECOMMUNICATIONS CONNECTOR INSERT PLATE FOR FLOOR BOXES AND/OR WALL PLATES	EC	EC
DATA SWITCHES, SERVERS, FIREWALL, ETC	OWNER	OWNER
EQUIPMENT RACKS WITHIN THE ER(MDF)/TR(IDF) FOR SYSTEM COMPONENTS	LVC	LVC
RACK MOUNT UPS, POWER DISTRIBUTION UNIT (PDU)	LVC	LVC
WIRELESS ACCESS POINTS	OWNER	OWNER
VIDEO & CAMERA SURVEILLANCE SYSTEM		
CAMERA ETHERNET EXTENDERS, PoE INJECRORS, POWER SUPPLIES		
(NVR) NETWORK VIDEO RECORDER	OWNER	SC
(VMS) VIDEO MANAGEMENT OPERATING SOFTWARE	OWNER	SC
IP CAMERA LICENSES	OWNER	SC
SURVEILLANCE IP CAMERA MOUNTS AND MOUNTING HARDWARE	OWNER	SC
VIDEO ANALYTIC SOFTWARE & LICENSING	OWNER	SC
128 GB MICRO SDXC CARD FOR SURVEILLANCE IP CAMERAS	OWNER	SC
OPERATING BASE STATION AND WORK STATION EQUIPMENT (SERVER, MONITOR, KEYBOARD, MOUSE)	OWNER	OWNER
POWER SURGE & SUPRESSION EQUIPMENT	OWNER	SC
SURVEILLANCE IP CAMERAS	OWNER	SC

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11/8/2023
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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AUDIOVISUAL SCHEDULES

T002

11/8/2023 7:00:59 PM

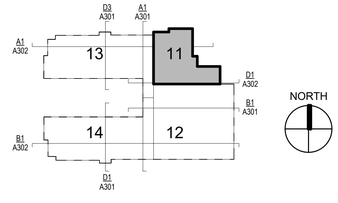
GENERAL SHEET NOTES

1. NON TYPICAL CLASSROOM THROUGH OUT THE BUILDING LAYOUTS VARY. REFER TO PLANS FOR APPROXIMATE AV EQUIPMENT LOCATIONS AND QUANTITIES FOR NON TYPICAL CLASSROOMS.
2. ALL SPECIFIED CONDUITS SHALL BE STUBBED UP INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED. PROVIDE PLASTIC CONDUIT BUSHING AT THE END OF CONDUIT.
3. ALL LOW VOLTAGE WIRE/ CABLES FOR INTERCOM, AV EQUIPMENT, ETC. SHALL BE PROPERLY SUPPORTED AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED AT SERVICE LOOPS MAINTAIN PROPER BEND RADIUS ON ALL CABLE.
4. CABLES SHALL BE BUNDLED BASED ON DIFFERENT SIGNAL TYPES AND DRESSED ACCORDINGLY TO ENSURE THAT CABLING IS TERMINATED, ORGANIZED, AND INSTALLED IN A NEAT AND ORGANIZED WAY TO PROVIDE LONG-TERM QUALITY, SERVICEABILITY,
5. COORDINATE ROUGH-IN LOCATIONS OF ALL DEVICES THROUGHOUT THE ROOM E.G. WALLS & CEILINGS (REFER TO ELEVATIONS ON SHEET E321) FOR IDEAL PLACEMENT COORDINATE FINAL PLACEMENT WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.

SHEET KEYNOTES

LEVEL 01 - AUDIOVISUAL RCP - AREA 11
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - AUDIOVISUAL RCP - AREA 11

T111.1

11/6/2023 7:01:02 PM

GENERAL SHEET NOTES

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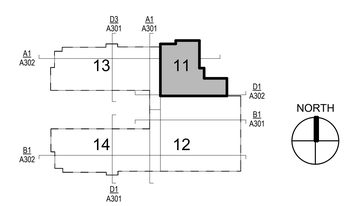
SHEET KEYNOTES

V2	CONTRACTOR TO MOUNT RECEIVER BEHIND FLAT PANEL, LEFT SIDE (FACING FLAT PANEL) IN ACCESSIBLE LOCATION.
V5	SECURE DIGITAL SIGNAGE PLAYER BEHIND FLAT PANEL, LEFT SIDE (FACING FLAT PANEL) IN ACCESSIBLE LOCATION.
V9	DEVICE LOCATED IN FLOOR BOX. REFER TO E SERIES SHEETS FOR LOCATION AND TYPE. LOCATE THE AV DEVICE IN A SINGLE GANG.
V17	PROVIDE TICKETING INTERCOM SYSTEM. MOUNT TO COUNTERTOP ON EACH SIDE OF GLASS AND CONNECT TOGETHER FROM UNDER THE COUNTERTOP. DO NOT PENETRATE THE GLASS.

LEVEL 01 - AUDIOVISUAL FP - AREA 11
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

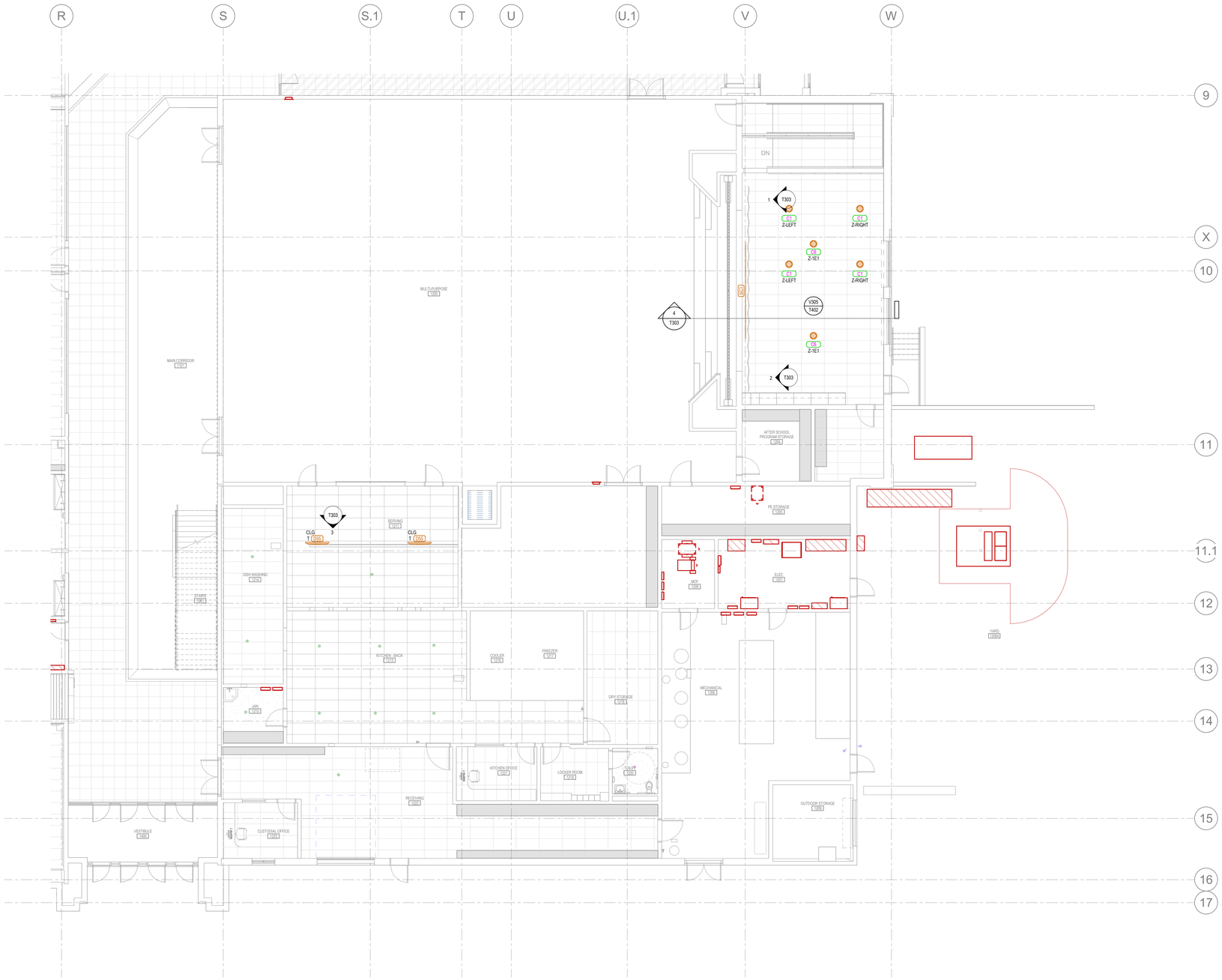
130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - AUDIOVISUAL FP - AREA 11

T111.2

11/6/2023 7:01:05 PM



LEVEL 01 - AUDIOVISUAL RCP - AREA 12
SCALE = 1/8" = 1'-0"

GENERAL SHEET NOTES

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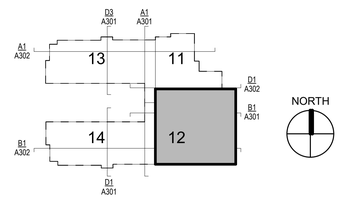
SHEET KEYNOTES

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - AUDIOVISUAL RCP - AREA 12

T112.1

11/6/2023 7:01:07 PM

GENERAL SHEET NOTES

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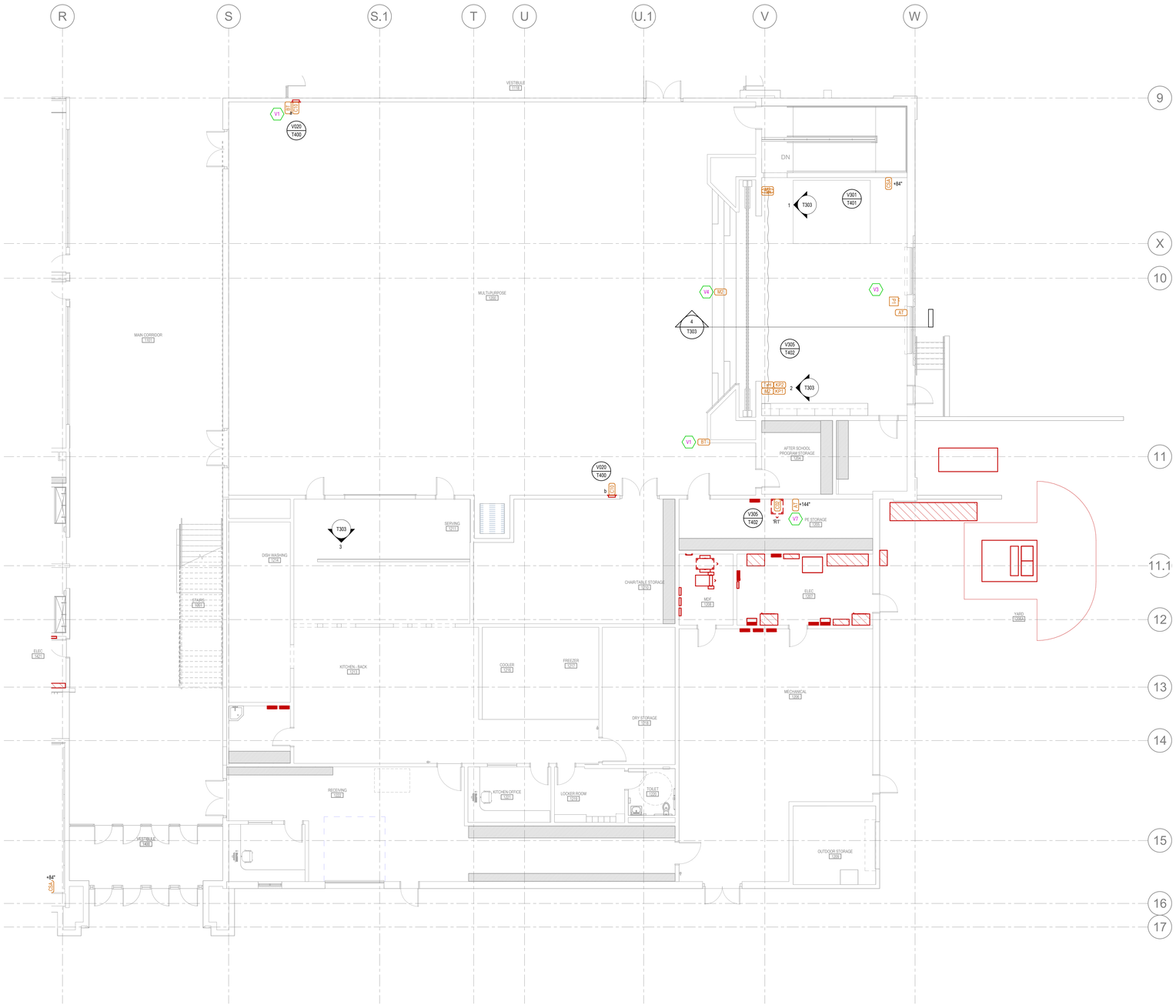
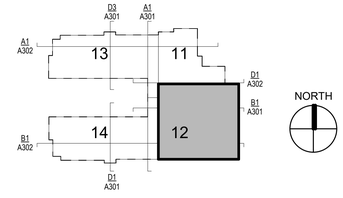
SHEET KEYNOTES

V1	MOUNT IN KEYED, CLEAR PROTECTIVE COVER.
V3	MOUNT PROJECTOR AT LEAST 1'-0" AWAY FROM WALL FOR VENTILATION. COORDINATE WITH OWNER ON EXACT PLACEMENT. INSTALL PROJECTOR CENTERED WITH THE PROJECTION SCREEN.
V4	LOCATE ADJACENT TO POWER OUTLET IN THE STAIR RISER.
V7	LOCATE ALS ANTENNA ABOVE EQUIPMENT RACK. FIELD COORDINATE LOCATION PRIOR TO ROUGH-IN.



LEVEL 01 - AUDIOVISUAL FP - AREA 12
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - AUDIOVISUAL FP - AREA 12

T112.2

11/6/2023 7:01:10 PM

SHEET KEYNOTES

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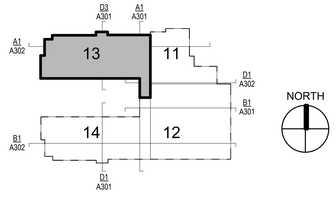
LEVEL 01 - AUDIOVISUAL RCP - AREA 13
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - AUDIOVISUAL RCP - AREA 13

T113.1

11/6/2023 7:01:13 PM

SHEET KEYNOTES

V2	CONTRACTOR TO MOUNT RECEIVER BEHIND FLAT PANEL, LEFT SIDE (FACING FLAT PANEL) IN ACCESSIBLE LOCATION.
V9	DEVICE LOCATED IN FLOOR BOX. REFER TO E SERIES SHEETS FOR LOCATION AND TYPE. LOCATE THE AV DEVICE IN A SINGLE GANG.

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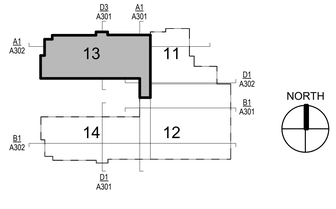

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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - AUDIOVISUAL FP - AREA 13

T113.2

SHEET KEYNOTES

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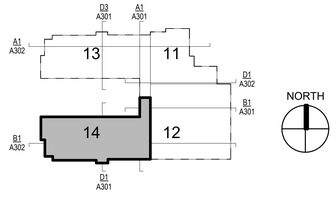
LEVEL 01 - AUDIOVISUAL RCP - AREA 14
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - AUDIOVISUAL RCP - AREA 14

T114.1

11/6/2023 7:01:20 PM

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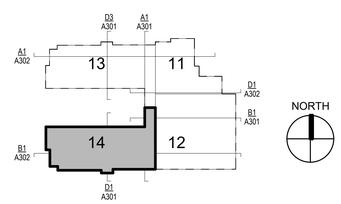
SHEET KEYNOTES

V2	CONTRACTOR TO MOUNT RECEIVER BEHIND FLAT PANEL, LEFT SIDE (FACING FLAT PANEL) IN ACCESSIBLE LOCATION.
V9	DEVICE LOCATED IN FLOOR BOX. REFER TO E SERIES SHEETS FOR LOCATION AND TYPE. LOCATE THE AV DEVICE IN A SINGLE GANG.

LEVEL 01 - AUDIOVISUAL FP - AREA 14
SCALE = 1/8" = 1'-0"

KEY PLAN - MAIN LEVEL



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VCBO NUMBER: 22785
CLIENT NUMBER: 23142
DATE: NOVEMBER 08 2023

PROFESSIONAL ENGINEER
BRIAN HICKS
No. 7709037-2202
11/8/2023
STATE OF UTAH

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4225 Lake Park Blvd, Suite 275
West Valley City, UT 84120
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F: 801.532.2305
www.bnaconsulting.com
SALT LAKE ST. GEORGE

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 01 - AUDIOVISUAL FP - AREA 14

T114.2

11/6/2023 7:01:23 PM

GENERAL SHEET NOTES

1. NON TYPICAL CLASSROOM THROUGH OUT THE BUILDING LAYOUTS VARY. REFER TO PLANS FOR APPROXIMATE AV EQUIPMENT LOCATIONS AND QUANTITIES FOR NON TYPICAL CLASSROOMS.
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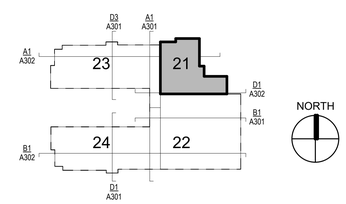
SHEET KEYNOTES

LEVEL 02 - AUDIOVISUAL RCP - AREA 21
SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - AUDIOVISUAL
RCP - AREA 21

T121.1

11/6/2023 7:01:26 PM

GENERAL SHEET NOTES

1. NON TYPICAL CLASSROOM THROUGH OUT THE BUILDING LAYOUTS VARY. REFER TO PLANS FOR APPROXIMATE AV EQUIPMENT LOCATIONS AND QUANTITIES FOR NON TYPICAL CLASSROOMS.
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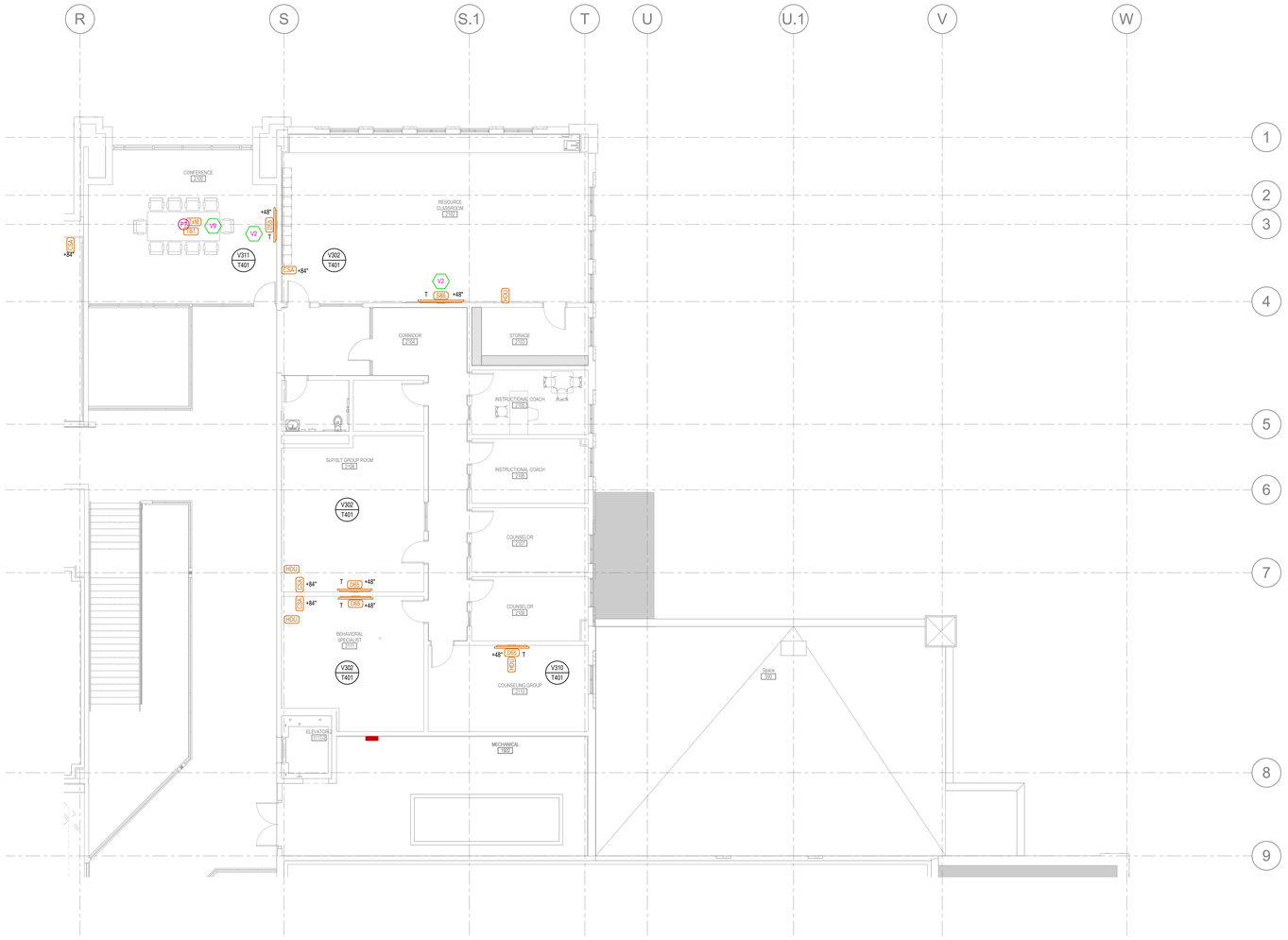
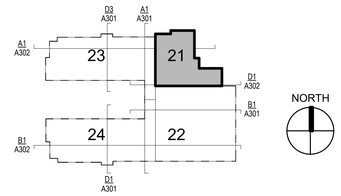


LEVEL 02 - AUDIOVISUAL FP - AREA 21
SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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SALT LAKE ST. GEORGE

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - AUDIOVISUAL FP - AREA 21

T121.2

11/6/2023 7:01:28 PM

GENERAL SHEET NOTES

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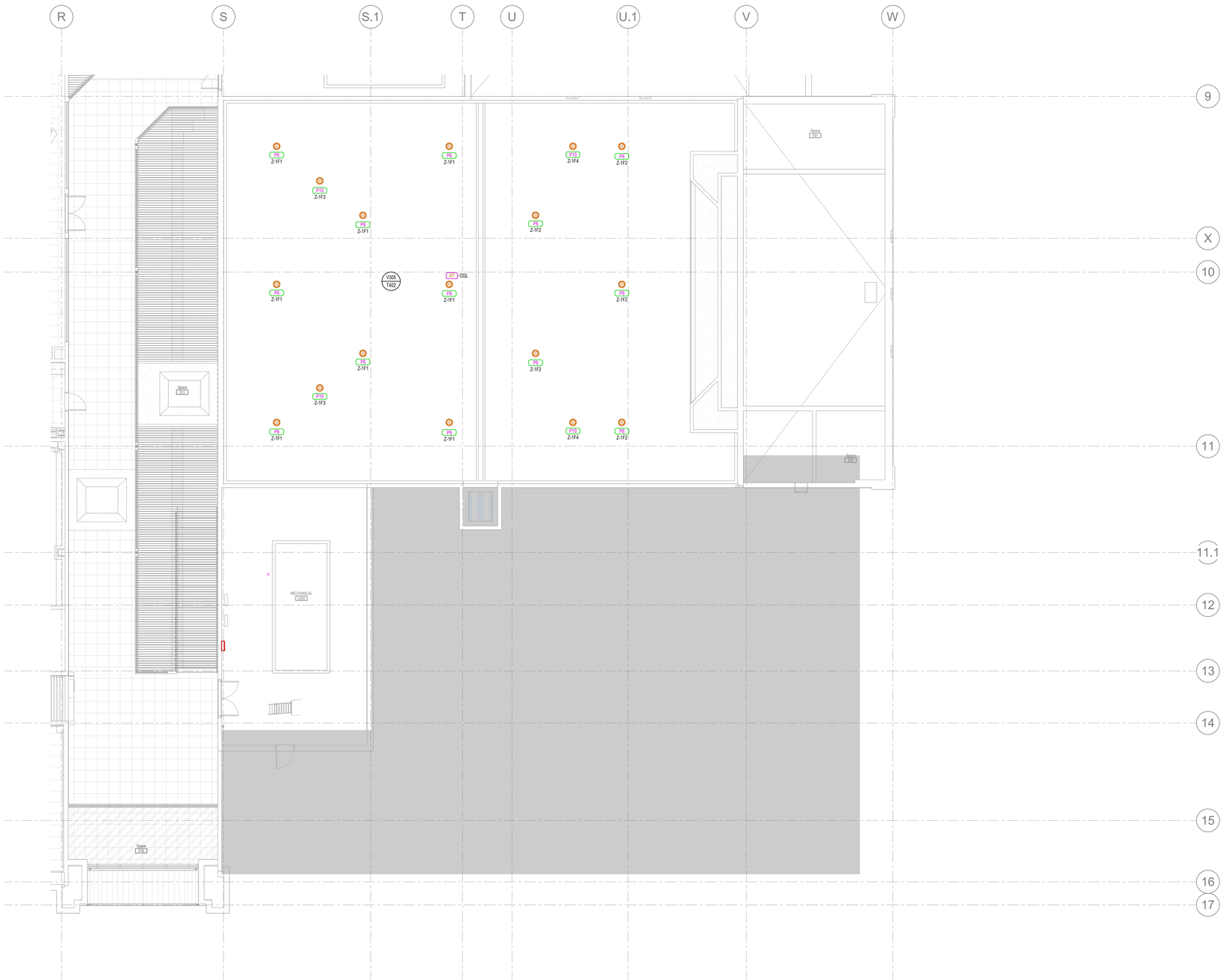
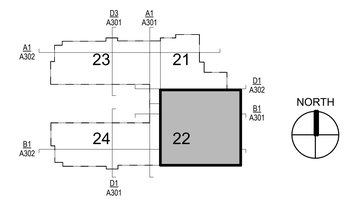


LEVEL 02 - AUDIOVISUAL RCP - AREA 22
SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - AUDIOVISUAL
RCP - AREA 22

T122.1

11/6/2023 7:01:31 PM

GENERAL SHEET NOTES

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SHEET KEYNOTES

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CLASSROOM 201A
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GENERAL SHEET NOTES

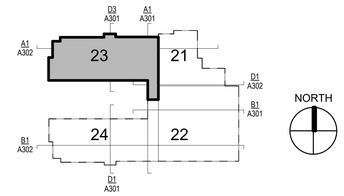
1. NON TYPICAL CLASSROOM THROUGH OUT THE BUILDING LAYOUTS VARY. REFER TO PLANS FOR APPROXIMATE AV EQUIPMENT LOCATIONS AND QUANTITIES FOR NON TYPICAL CLASSROOMS.
2. ALL SPECIFIED CONDUITS SHALL BE STUBBED UP INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED. PROVIDE PLASTIC CONDUIT BUSHING AT THE END OF CONDUIT.
3. ALL LOW VOLTAGE WIRE/ CABLES FOR INTERCOM, AV EQUIPMENT, ETC. SHALL BE PROPERLY SUPPORTED AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED AT SERVICE LOOPS MAINTAIN PROPER BEND RADIUS ON ALL CABLE.
4. CABLES SHALL BE BUNDLED BASED ON DIFFERENT SIGNAL TYPES AND DRESSED ACCORDINGLY TO ENSURE THAT CABLING IS TERMINATED, ORGANIZED, AND INSTALLED IN A NEAT AND ORGANIZED WAY TO PROVIDE LONG-TERM QUALITY, SERVICEABILITY,
5. COORDINATE ROUGH-IN LOCATIONS OF ALL DEVICES THROUGHOUT THE ROOM E.G. WALLS & CEILINGS (REFER TO ELEVATIONS ON SHEET E321) FOR IDEAL PLACEMENT COORDINATE FINAL PLACEMENT WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.

SHEET KEYNOTES

V2	CONTRACTOR TO MOUNT RECEIVER BEHIND FLAT PANEL, LEFT SIDE (FACING FLAT PANEL) IN ACCESSIBLE LOCATION.
V9	DEVICE LOCATED IN FLOOR BOX. REFER TO E SERIES SHEETS FOR LOCATION AND TYPE. LOCATE THE AV DEVICE IN A SINGLE GANG.

LEVEL 02 - AUDIOVISUAL FP - AREA 23
SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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DATE: NOVEMBER 08 2023

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No. 7709037
11/8/2023
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SALT LAKE ST. GEORGE

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - AUDIOVISUAL FP - AREA 23

T123.2

11/6/2023 7:01:37 PM

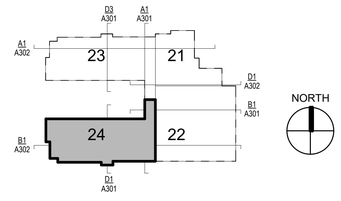
SHEET KEYNOTES

GENERAL SHEET NOTES

1. NON TYPICAL CLASSROOM THROUGH OUT THE BUILDING LAYOUTS VARY. REFER TO PLANS FOR APPROXIMATE AV EQUIPMENT LOCATIONS AND QUANTITIES FOR NON TYPICAL CLASSROOMS.
2. ALL SPECIFIED CONDUITS SHALL BE STUBBED UP INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED. PROVIDE PLASTIC CONDUIT BUSHING AT THE END OF CONDUIT.
3. ALL LOW VOLTAGE WIRE/ CABLES FOR INTERCOM, AV EQUIPMENT, ETC. SHALL BE PROPERLY SUPPORTED AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED AT SERVICE LOOPS MAINTAIN PROPER BEND RADIUS ON ALL CABLE.
4. CABLES SHALL BE BUNDLED BASED ON DIFFERENT SIGNAL TYPES AND DRESSED ACCORDINGLY TO ENSURE THAT CABLING IS TERMINATED, ORGANIZED, AND INSTALLED IN A NEAT AND ORGANIZED WAY TO PROVIDE LONG-TERM QUALITY, SERVICEABILITY,
5. COORDINATE ROUGH-IN LOCATIONS OF ALL DEVICES THROUGHOUT THE ROOM E.G. WALLS & CEILINGS (REFER TO ELEVATIONS ON SHEET E321) FOR IDEAL PLACEMENT COORDINATE FINAL PLACEMENT WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.

LEVEL 02 - AUDIOVISUAL RCP - AREA 24
SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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130 N. ECCLES AVE., OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - AUDIOVISUAL RCP - AREA 24

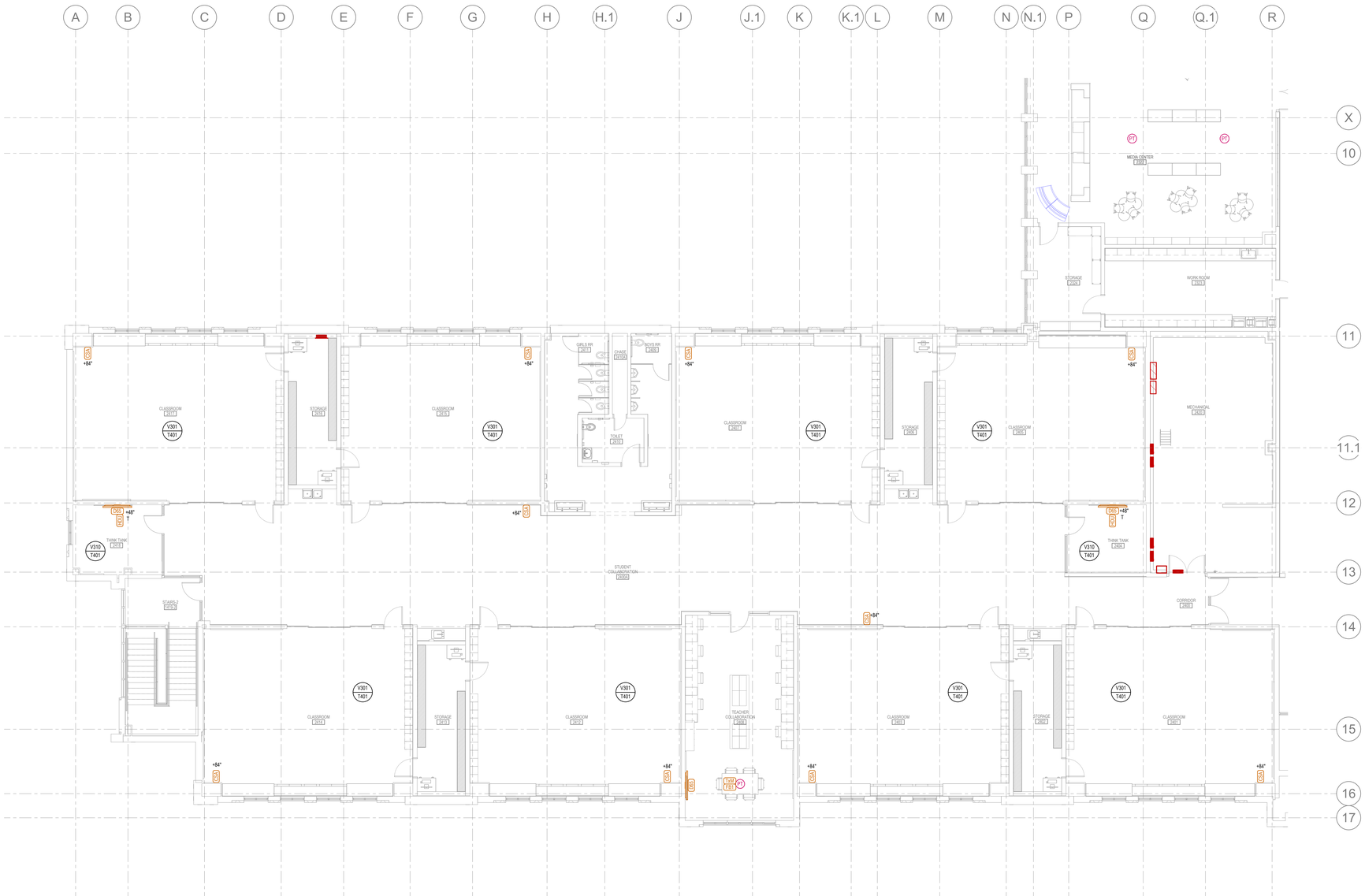
T124.1

11/6/2023 7:01:41 PM

GENERAL SHEET NOTES

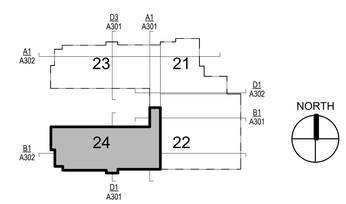
1. NON TYPICAL CLASSROOM THROUGH OUT THE BUILDING LAYOUTS VARY. REFER TO PLANS FOR APPROXIMATE AV EQUIPMENT LOCATIONS AND QUANTITIES FOR NON TYPICAL CLASSROOMS.
2. ALL SPECIFIED CONDUITS SHALL BE STUBBED UP INTO ACCESSIBLE CEILING SPACE, UNLESS OTHERWISE NOTED. PROVIDE PLASTIC CONDUIT BUSHING AT THE END OF CONDUIT.
3. ALL LOW VOLTAGE WIRE/ CABLES FOR INTERCOM, AV EQUIPMENT, ETC. SHALL BE PROPERLY SUPPORTED AT 5'-0" INTERVALS AND TO FOLLOW BUILDING STRUCTURAL LINES. PULLING WIRE DIAGONALLY ACROSS ROOMS IS NOT ALLOWED. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED AT SERVICE LOOPS MAINTAIN PROPER BEND RADIUS ON ALL CABLE.
4. CABLES SHALL BE BUNDLED BASED ON DIFFERENT SIGNAL TYPES AND DRESSED ACCORDINGLY TO ENSURE THAT CABLING IS TERMINATED, ORGANIZED, AND INSTALLED IN A NEAT AND ORGANIZED WAY TO PROVIDE LONG-TERM QUALITY, SERVICEABILITY,
5. COORDINATE ROUGH-IN LOCATIONS OF ALL DEVICES THROUGHOUT THE ROOM E.G. WALLS & CEILINGS (REFER TO ELEVATIONS ON SHEET E321) FOR IDEAL PLACEMENT COORDINATE FINAL PLACEMENT WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.

SHEET KEYNOTES



LEVEL 02 - AUDIOVISUAL FP - AREA 24
SCALE = 1/8" = 1'-0"

KEY PLAN - UPPER LEVEL



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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

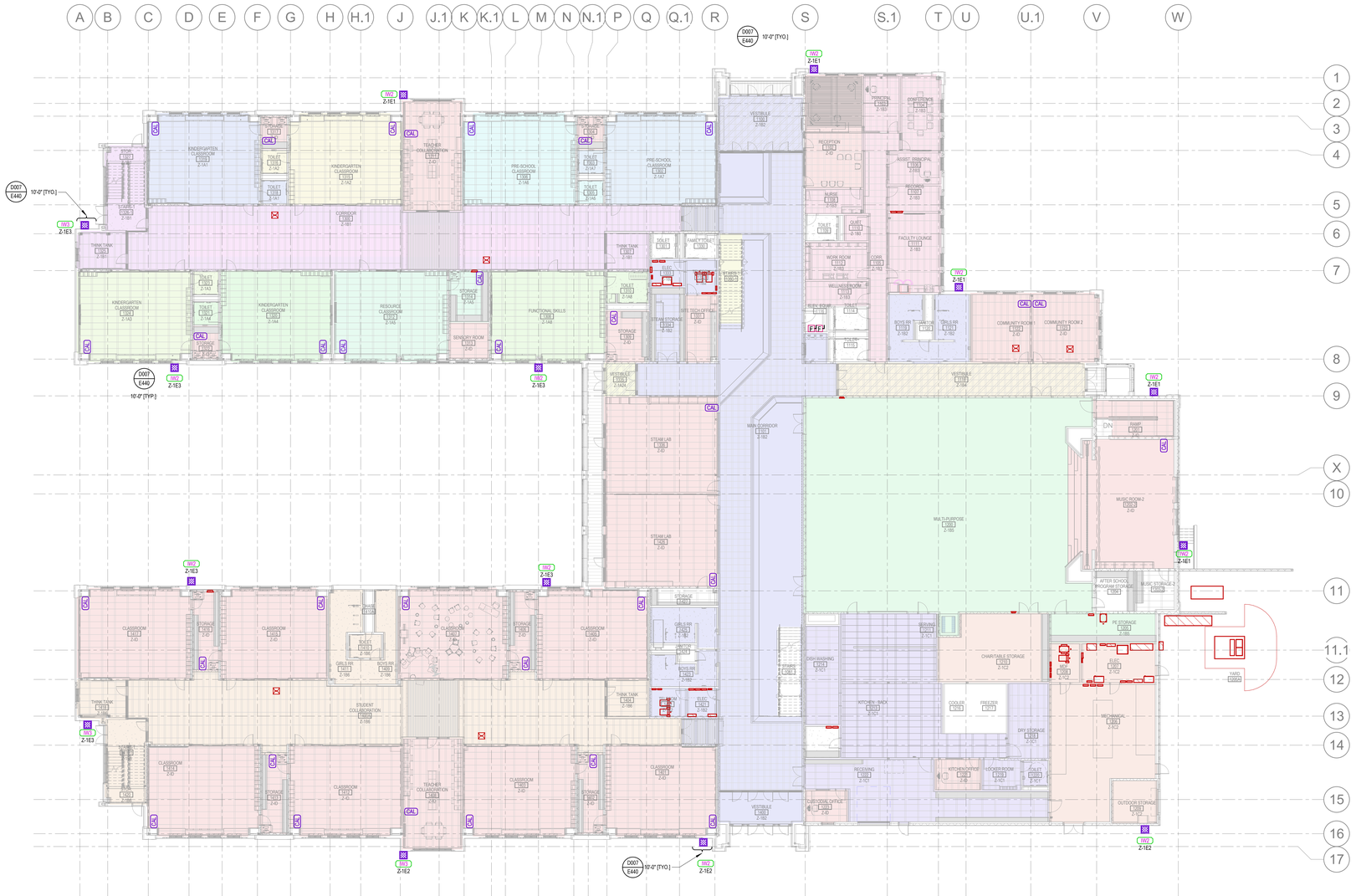
BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 02 - AUDIOVISUAL FP - AREA 24

T124.2

11/6/2023 7:01:44 PM

SHEET KEYNOTES


A B C D E F G H H.1 J J.1 K K.1 L M N N.1 P Q Q.1 R S S.1 T U U.1 V W
1 2 3 4 5 6 7 8 9 X 10 11 11.1 12 13 14 15 16 17
D007 E440 10'-0" [TYP.]
IW2 Z-1E1
IW2 Z-1E3
IW2 Z-1E2
CAL
KINDERGARTEN CLASSROOM 101 Z-1A1
KINDERGARTEN CLASSROOM 102 Z-1A2
KINDERGARTEN CLASSROOM 103 Z-1A3
KINDERGARTEN CLASSROOM 104 Z-1A4
RESOURCE CLASSROOM 105 Z-1A5
FUNCTIONAL SKILLS 106 Z-1A6
PRE-SCHOOL CLASSROOM 106 Z-1A6
PRE-SCHOOL CLASSROOM 107 Z-1A7
CLASSROOM 401 Z-4D
CLASSROOM 402 Z-4D
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CLASSROOM 405 Z-4D
CLASSROOM 406 Z-4D
CLASSROOM 407 Z-4D
CLASSROOM 408 Z-4D
TEACHER COLLABORATION 180 Z-180
STUDENT COLLABORATION 180A Z-180
TEACHER COLLABORATION 180 Z-180
STORAGE Z-1A2
STORAGE Z-1A4
STORAGE Z-1A5
STORAGE Z-1A6
STORAGE Z-4D
STORAGE Z-4D
STORAGE Z-4D

SHEET KEYNOTES

LEVEL 2 - INTERCOM PLAN OVERALL
SCALE = 1/16" = 1'-0"

INTERCOM ZONE LEGEND

- Z-1A1
- Z-1A2
- Z-1A3
- Z-1A4
- Z-1A5
- Z-1A6
- Z-1A7
- Z-1A8
- Z-1A10
- Z-1A24
- Z-1A29
- Z-1B1
- Z-1B2
- Z-1B3
- Z-1B4
- Z-1B5
- Z-1B6
- Z-1C1
- Z-1C2
- Z-2B1
- Z-2B2
- Z-2B3
- Z-ID

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REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

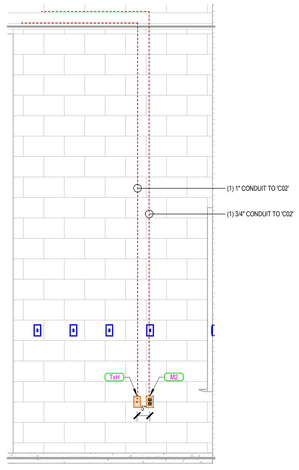
BID PACKAGE 5 - GENERAL CONSTRUCTION

LEVEL 2 - INTERCOM PLAN OVERALL

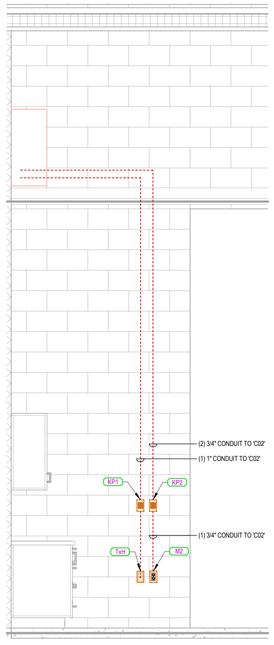
T302

11/6/2023 7:02:01 PM

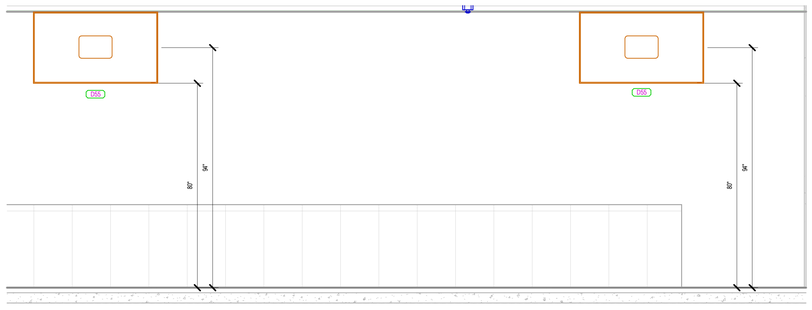
SHEET KEYNOTES



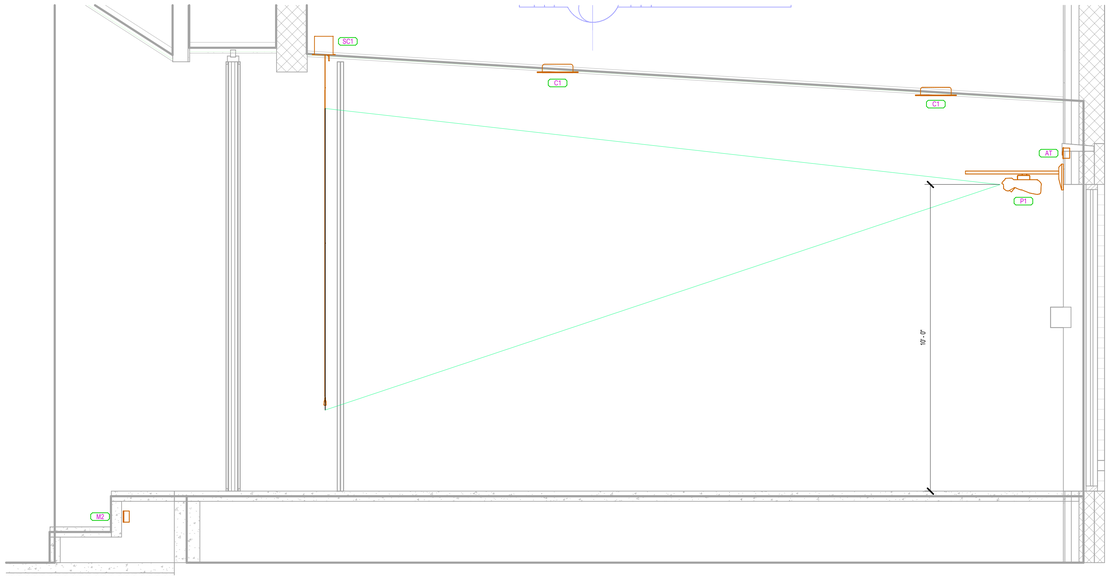
1 MUSIC ROOM 1202 INTERIOR ELEVATION
SCALE = 1/2" = 1'-0"



2 MUSIC ROOM 1202 INTERIOR ELEVATION
SCALE = 1/2" = 1'-0"



3 SERVING - 1211 AV ELEVATION
SCALE = 1/2" = 1'-0"



4 MUSIC ROOM 1202 INTERIOR ELEVATION
SCALE = 1/2" = 1'-0"

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OSD HILLCREST ELEMENTARY REBUILD

130 N. ECCLES AVE., OGDEN, UT 84404

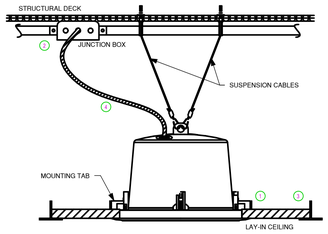
BID PACKAGE 5 - GENERAL CONSTRUCTION

AUDIOVISUAL ELEVATIONS

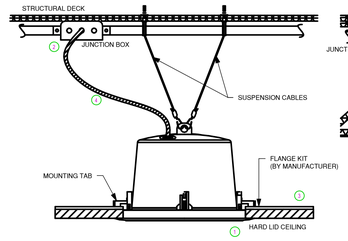
T303

11/6/2023 7:02:08 PM

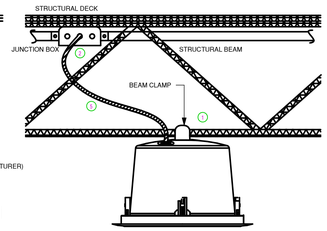
LAY-IN CEILING



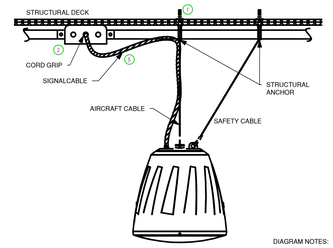
HARD LID CEILING



STRUCTURE MOUNT



PENDANT MOUNT



INDIRECT SOUNDMASKING

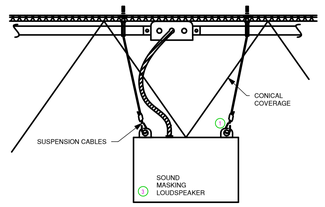


DIAGRAM NOTES:

1. AV CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINAL MOUNTING METHOD AND REQUIRED MOUNTING ACCESSORIES BASED ON CEILING TYPE AND INSTALLATION REQUIREMENTS.
2. POSITION JUNCTION BOX OVER LOUDSPEAKER LOCATION SHOWN. INSTALL WITH BLANK COVER FACING DOWNWARD.
3. PROVIDE TILE BRIDGE FOR LAY-IN TILE INSTALLATION. PROVIDE SECONDARY SEISMIC SUPPORT HARDWARE FROM STRUCTURE ABOVE (AS REQUIRED PER AHJ).
4. PROVIDE 1/2" FLEXIBLE CONDUIT AS REQUIRED PER INSTALLATION. FLEXIBLE CONDUIT AND/OR CABLING SHALL NOT DIP BELOW THE LOUDSPEAKER BUT ALLOW ENOUGH CABLE FOR THE LOUDSPEAKER TO BE REPLACED.
5. PROVIDE CABLE GRIP IN JUNCTION BOX WHERE CABLING EXITS. CABLING SHALL BE NEATLY SECURED, OUT OF SITE, TO THE LOUDSPEAKER.

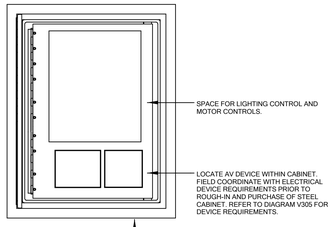
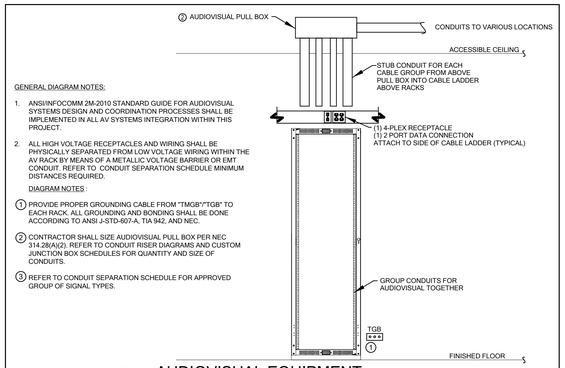


DIAGRAM V020 AV CABINET
NTS



GENERAL DIAGRAM NOTES:

1. ANSI/INFOCOMM 2M-2010 STANDARD GUIDE FOR AUDIOVISUAL SYSTEMS DESIGN AND COORDINATION PROCESSES SHALL BE IMPLEMENTED IN ALL AV SYSTEMS INTEGRATION WITHIN THIS PROJECT.
2. ALL HIGH VOLTAGE RECEPTACLES AND WIRING SHALL BE PHYSICALLY SEPARATED FROM LOW VOLTAGE WIRING WITHIN THE AV RACK BY MEANS OF A METALLIC VOLTAGE BARRIER OR EMT CONDUIT. REFER TO CONDUIT SEPARATION SCHEDULE MINIMUM DISTANCES REQUIRED.

DIAGRAM NOTES :

1. PROVIDE PROPER GROUNDING CABLE FROM "TMGB"/"TGB" TO EACH RACK. ALL GROUNDING AND BONDING SHALL BE DONE ACCORDING TO ANSI J-STD-607-A, TIA 942, AND NEC.
2. CONTRACTOR SHALL SIZE AUDIOVISUAL PULL BOX PER NEC 314.28(A)(2). REFER TO CONDUIT RISER DIAGRAMS AND CUSTOM JUNCTION BOX SCHEDULES FOR QUANTITY AND SIZE OF CONDUITS.
3. REFER TO CONDUIT SEPARATION SCHEDULE FOR APPROVED GROUP OF SIGNAL TYPES.

DIAGRAM V021 AUDIOVISUAL EQUIPMENT RACK AND CONDUIT ROUGH-IN
NTS

DIAGRAM NOTES:

1. NAMING ON INPUT PLATES SHALL COORDINATE WITH EACH INPUT FOR THAT SYSTEM. EXAMPLE: WALL PLATE WITH HDMI AND AUDIO SHALL BE LABELED VIDEO 1 AND AUDIO 1.

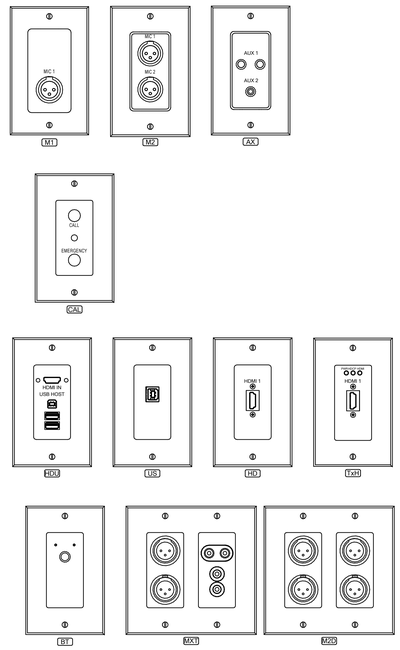


DIAGRAM V100 TYPICAL AV WALL PLATES
NTS

DIAGRAM NOTES:

1. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR ADDITIONAL ROUGH-IN INFORMATION.
2. CENTER DISPLAY/SCREEN OVER FLAT PANEL DISPLAY WALL BOX. REFER TO SPECIFICATIONS FOR MAKE AND MODEL OF FLAT PANEL DISPLAY WALL BOX.
3. DEVICES SHOWN IN THIS DIAGRAM MIGHT NOT BE REQUIRED. REFER TO PLANS FOR DEVICES INSTALLED IN WALL BOX.
4. REFER TO FLOOR PLANS FOR CONDUIT REQUIREMENTS. PROVIDE ONE SPARE 1" CONDUIT FROM WALL BOX TO ACCESSIBLE CEILING IF NO CONDUITS ARE SHOWN ON FLOOR PLANS.
5. CENTER DISPLAY WITH FURNITURE. COORDINATE WITH FINAL ARCHITECTURAL FURNITURE PLANS FOR PROPOSED LAYOUT OF FURNITURE PRIOR TO ROUGH-IN.

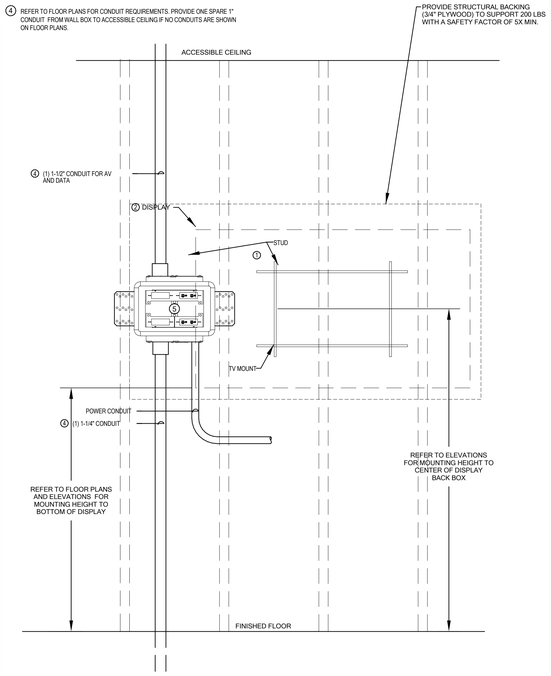


DIAGRAM V202 FLAT PANEL DISPLAY MOUNT (TYPICAL)
NTS

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130 N. ECCLES AVE,, OGDEN, UT 84404

BID PACKAGE 5 - GENERAL CONSTRUCTION

AUDIOVISUAL ROUGH-IN DIAGRAMS

T400

11/6/2023 7:02:09 PM

DIAGRAM NOTES

1. REFER TO FLOOR PLANS FOR DISPLAY INFORMATION AND MOUNTING HEIGHTS.
2. SECURE DEVICE BEHIND DISPLAY.
3. REFER FLOOR PLAN FOR LOCATION OF DEVICE.
4. DEVICE TO BE CONTROLLED USING HOT PLUG ON HDMI CABLE. DISPLAY SHALL TURN ON ONCE IT DETECTS A SIGNAL FROM THE TRANSMITTER AND TURN OFF AFTER THEIR IS NOT SIGNAL DETECTED FOR 5 MINUTES.
5. INPUT FROM VIDEO SWITCHER/RECEIVER SHALL BE ON INPUT 1 THROUGHOUT THE PROJECT, UNLESS IT IS NEEDED FOR ANOTHER FEATURE.
6. CONTROL MONITOR WITH SERIAL PORT FROM TRANSMITTER OR CONTROL SYSTEM SERIAL CONNECTION.
7. CONNECT MONITOR TO NETWORK WHEN SPARE DATA CONNECTION IS PRESENT. UNLESS OTHERWISE NOTED WITHIN THE CONTRACT DOCUMENTS.
8. DIGITAL SIGNAGE INPUT. REFER TO FLOOR PLANS AND SPECIFICATION FOR DISPLAYS REQUIRING DIGITAL SIGNAGE. CONNECT CABLE TV INTO DIGITAL SIGNAGE PLAYER.
9. REFER TO FLOOR PLANS FOR DISPLAYS REQUIRING A SOUND BAR.

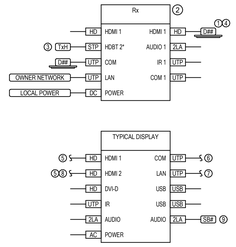


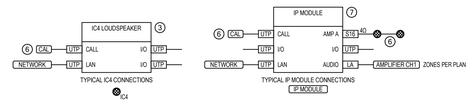
DIAGRAM V320 TYPICAL DISPLAY CONNECTION
NTS

GENERAL DIAGRAM NOTES:

1. INTEGRATOR IS RESPONSIBLE TO ENSURE COMPLETE FUNCTIONALITY OF INTERCOM SYSTEMS IN ALL OCCUPIED AREAS OF THE SCHOOL THROUGHOUT ALL ZONES OF CONSTRUCTION. USING CEILING SYSTEM OR LIGHT FIXTURE SUPPORT/SEISMIC WIRES FOR SUPPORT IS NOT ALLOWED. AT SERVICE LOOPS MAINTAIN PROPER BEND RADIUS ON ALL CABLE.
2. PROVIDE (1) PAGING MODULE FOR EACH CORRIDOR THAT WILL REQUIRE A SEPARATE ZONE. REFER TO DRAWINGS AND SPECIFICATIONS FOR ZONE DESIGNATION.
3. MULTIPLE ZONES SHALL NOT SHARE A SINGLE AMPLIFIER CHANNEL OR IP MODULE.
4. AMPLIFIER REFERENCES SHOWN ON PLANS ARE INTENDED TO SHOW ZONING INFORMATION NOT MULTI-CHANNEL AMPLIFIER REQUIREMENTS. REFER TO SPECIFICATIONS FOR AMPLIFIER REQUIREMENTS.
5. REFER TO FLOOR PLANS FOR QUANTITY OF CLASSROOMS REQUIRING CLASSROOM MODULE CONNECTIONS.
6. EXTERIOR LOUDSPEAKERS SHALL EACH BE HOME RUN BACK TO THE AMPLIFIER CHANNEL FOR THEIR ZONE. LABEL AND CONNECT THE ZONES AS INDICATED ON PLANS.

DIAGRAM NOTES:

1. PROVIDE (1) RELAY FROM INTERCOM SYSTEM TO ACCESS CONTROL SYSTEM. PROGRAM THIS RELAY TO TRIGGER A PREVENTATIVE LOCK DOWN. WHICH LOCKS THE OFFICE ENTRANCES. COORDINATE EXACT TERMINATION AND PROGRAMMING REQUIREMENTS WITH ACCESS CONTROL INSTALLER.
2. CONFIRM EXACT LOCATION OF DEVICE(S) WITH OWNER. REFER TO E SERIES SHEETS FOR LOCATION OF DATA CONNECTIONS.
3. REFER TO CLASSROOM SIGNAL FLOWS FOR ADDITIONAL REQUIREMENTS.
4. AMPLIFIERS ARE SHOWN FOR REFERENCE ONLY. COORDINATE WITH THE PLANS FOR ZONE REQUIREMENTS.
5. LOCATE NETWORK SWITCH(ES) IN THE ER/TR (MDF/IDF) FOR THE AREA REQUIRING DEVICE CONNECTION(S). NETWORK SWITCH(ES) WILL USE THE OWNERS BACKBONE FOR SIGNAL ROUTING BETWEEN EACH OTHER. REFER TO SPECIFICATIONS FOR NETWORK COORDINATION AND ADDITIONAL REQUIREMENTS.
6. ROOM SPECIFIC REQUIREMENT. REFER TO FLOOR PLANS FOR LOCATION AND REQUIREMENTS. ZONES UNDER 3 LOUDSPEAKERS MAY USE THE IP MODULES BUILT IN AMPLIFIER. ZONES WITH 3 AND MORE WILL REQUIRE AN ADDITIONAL AMPLIFIER.
7. EACH ZONE WILL REQUIRE AN UNIQUE IP MODULE TO COVER THAT ZONE. COMBINING IP MODULES FOR MULTIPLE ZONES IS NOT ALLOWED.



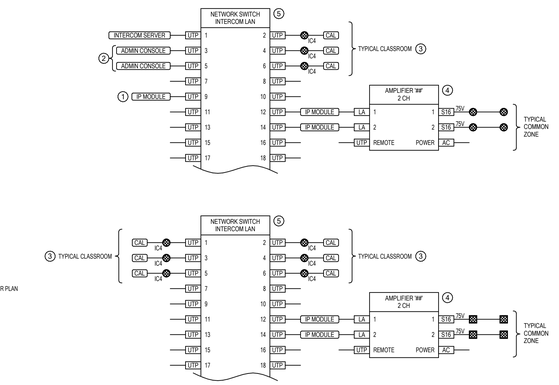


DIAGRAM V350 IP INTERCOM SYSTEM SIGNAL FLOW
NTS

DIAGRAM NOTES:

1. DEVICE LOCATED BEHIND DISPLAY.
2. CONNECT TO OWNER LAN. ENSURE POWER OVER ETHERNET (POE) CONNECTION IS PROVIDED. CONTRACTOR SHALL PROVIDE POE+ INJECTOR IF SWITCH DOES NOT SUPPLY ENOUGH POE.
3. ENSURE CONNECTION TO OWNER LAN.

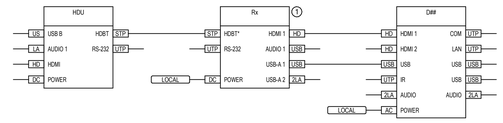


DIAGRAM V310 CONFERENCE ROOM TYPE 2A SIGNAL FLOW
NTS

DIAGRAM NOTES:

1. CONNECT TO INTERCOM HEAD-END.
2. DEVICE LOCATED IN CEILING RACK.
3. SEE FLOOR PLANS FOR EXACT LOCATION.
4. CONNECT TO OWNER LAN, ENSURE POWER OVER ETHERNET (POE) CONNECTION IS PROVIDED. CONTRACTOR SHALL PROVIDE POE+ INJECTOR IF SWITCH DOES NOT SUPPLY ENOUGH POE.
5. REFER TO COLLABORATION AREAS FOR ZONING INFORMATION.

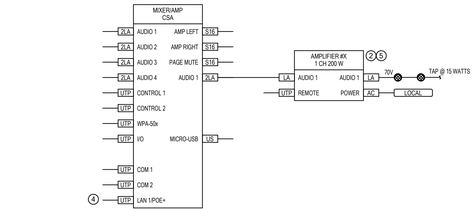


DIAGRAM V303 COLLABORATION AREA
NTS

DIAGRAM NOTES:

1. DEVICE LOCATED BEHIND DISPLAY.
2. CONNECT TO OWNER LAN. ENSURE POWER OVER ETHERNET (POE) CONNECTION IS PROVIDED. CONTRACTOR SHALL PROVIDE POE+ INJECTOR IF SWITCH DOES NOT SUPPLY ENOUGH POE.
3. ENSURE CONNECTION TO OWNER LAN.

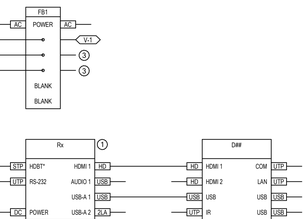


DIAGRAM V311 CONFERENCE ROOM TYPE 1A SIGNAL FLOW
NTS

DIAGRAM NOTES:

1. DEVICE LOCATED BEHIND DISPLAY.
2. CONNECT TO OWNER LAN. ENSURE POWER OVER ETHERNET (POE) CONNECTION IS PROVIDED. CONTRACTOR SHALL PROVIDE POE+ INJECTOR IF SWITCH DOES NOT SUPPLY ENOUGH POE.
3. ROOMS WITH MORE THAN 4 LOUDSPEAKERS WILL REQUIRE AN ADDITIONAL AMPLIFIER. REFER TO FLOOR PLANS FOR ROOMS WITH MORE THAN 4 LOUDSPEAKERS AND SPECIFICATIONS FOR MAKE AND MODEL.

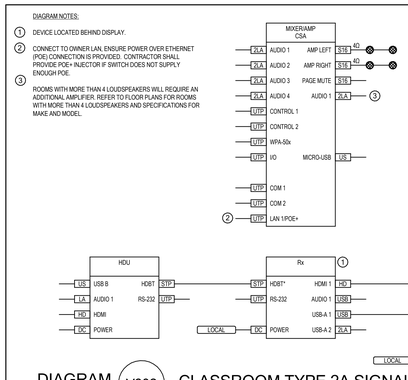


DIAGRAM V302 CLASSROOM TYPE 2A SIGNAL FLOW
NTS

DIAGRAM NOTES:

1. CONNECT TO INTERCOM HEAD-END.
2. DEVICE LOCATED IN CEILING RACK.
3. SEE FLOOR PLANS FOR EXACT LOCATION.
4. CONNECT TO OWNER LAN, ENSURE POWER OVER ETHERNET (POE) CONNECTION IS PROVIDED. CONTRACTOR SHALL PROVIDE POE+ INJECTOR IF SWITCH DOES NOT SUPPLY ENOUGH POE.

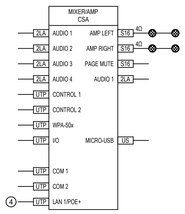


DIAGRAM V301 CLASSROOM TYPE 1A SIGNAL FLOW
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BID PACKAGE 5 - GENERAL CONSTRUCTION

AUDIOVISUAL DIAGRAMS

T401

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DIAGRAM NOTES:

1. CONNECT TO OWNER LAN.
2. DEVICE LOCATED IN MULTIPURPOSE ROOM. REFER FLOOR PLANS FOR EXACT LOCATION.
3. DEVICE LOCATED IN EQUIPMENT RACK 'R1'.
4. PROVIDE TOGGLE SWITCH WITHIN CABINET FOR COMBINING AND UNCOMBINING THE SPACE. LABEL THE TOP COMBINED AND THE BOTTOM UNCOMBINED. CONNECT TO IO ON DSP.
5. DEVICE LOCATED IN JUNCTION BOX C10a. SEE FLOOR PLANS FOR EXACT LOCATION.
6. DEVICE LOCATED IN JUNCTION BOX C10b. SEE FLOOR PLANS FOR EXACT LOCATION.
7. NOT USED.
8. DEVICE LOCATED ON STAGE. REFER FLOOR PLANS FOR EXACT LOCATION.
9. CONNECT EACH RECEIVER TO THE DISTRO, REFER TO DSP FOR NUMBER OF RECEIVERS.
10. WIRELESS CHANNEL INTENDED FOR EAST SIDE OF THE GYM WHEN NOT COMBINED.
11. WIRELESS CHANNEL INTENDED FOR WEST SIDE OF THE GYM WHEN NOT COMBINED.

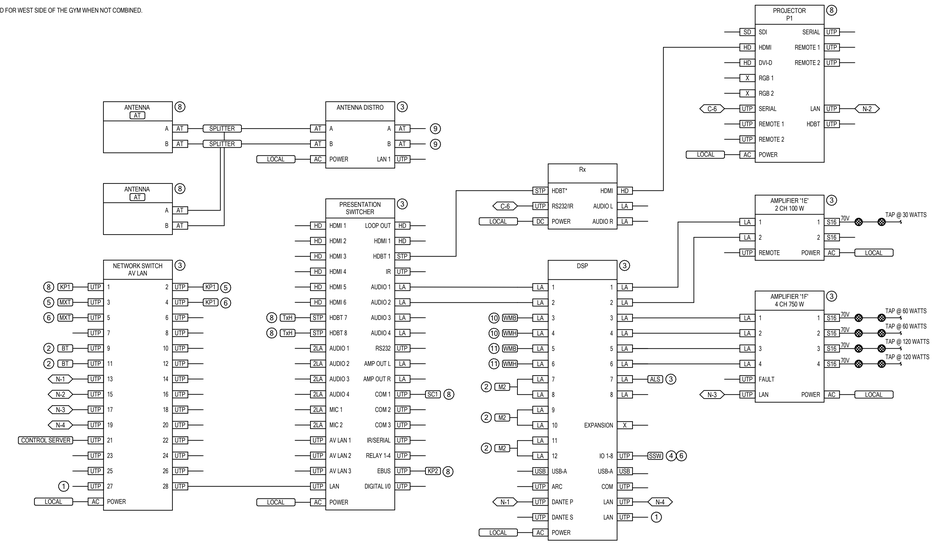

DIAGRAM V305 MULTIPURPOSE ROOM SIGNAL FLOW

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SALT LAKE ST. GEORGE

REV	DATE	DESCRIPTION

OSD HILLCREST ELEMENTARY REBUILD

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BID PACKAGE 5 - GENERAL CONSTRUCTION

AUDIOVISUAL DIAGRAMS

T402

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